

Project Number: 700670
Project Acronym: GAP
D7.6 Final Conference report



Project Start Date: 1.9.2016

Project Duration: 30 months

D7.6 Final Conference Report

Deliverable details	
Deliverable number	
Author(s)	Laurea UAS: Petteri Taitto, Kristina Henriksson, Harri Ruoslahti, Kirsi Hyttinen
Due date	28.2.2019
Delivered date	
Reviewed by	Anne Holohan
Dissemination level	PU
Contact person EC	Carla Rocha-Gomes

History of Changes			
Date	Version	Person in Charge	Description
30/01/2019	v0.1	Mikko Häkkinen, Kari Liimatainen	Deliverable content
31/01/2019	v0.2	Kristina Henriksson, Harri Ruoslahti	Deliverable writing, Consolidation of chapters (Henriksson)
07/02/2019	v0.3	Petteri Taitto	Edition and revision of the text, Introduction and Conclusions
11/02/2019	v0.4	Kirsi Hyttinen	Additions, Editing and Review
12/02/2019	v0.5	Kirsi Hyttinen	Annex 1 included
13/02/2019	v.06	Justyna Pyz, Anne Holohan	Additions, Editing and Review



CONTENTS

EXECUTIVE SUMMARY	4
1 INTRODUCTION	5
2 OPENING SPEECH: FILLING THE GAP	7
4 A CURRICULUM FOR THE ROLE OF POLICE IN PEACEKEEPING	11
4.1 Police Officers on Peacekeeping Missions – Their Tasks and Preparation by Walentyna Trzcińska (WSPOL)	11
4.2 The Importance of Training on Soft Skills for Police Officers Deployed to International Peace Operations by Markus Feilke (German Federal Police)	12
4.3 Policing Lessons from Kosovo by Peter McCutcheon (PSNI)	13
5 GAME-BASED SOFT SKILLS LEARNING IN DIFFERENT SECTORS	15
5.1 Game-Based Learning into Today's Workplace: Who's Winning? by Janet Benson (Learnovate, TCD)	15
5.2 Unlocking the Imagination, Creativity, Empathy & Innovation – Gaming for Environmental & Inner Peace by Ciara Kennedy (AnimaVenture)	16
6 CULTURE AS A RESOURCE	17
6.1 Cross-Cultural Competence in GAP by Ryszard Szpyra (Polish National Defense University)	17
6.2 Developing Global Leaders with Cross-Cultural Competency by Yvonne Masakowski (Naval War College in Newport)	19
6.3 Steps Towards Building Effective Intercultural Relations by Livingstone Thompson (SIETAR)	20
7 KEYNOTE SPEECH BY TOM DIGBY	21
8 TRAINING NEEDS IN CONTEMPORARY PEACEKEEPING MISSIONS	22
8.1 Pre Deployment Training by Timothy O'Brien (Defence Forces PSO)	22
8.2 Focusing on Critical Needs – Soft Skills for Hard Results by Jonas Alberoth (Folke Bernadotte Academy (FBA)	23
9 ASSESSMENT TOOLS TO IMPROVE ORGANISATIONAL EFFECTIVENESS	26
9.1 Tracking Soft Skills Learning at Individual and Organizational Level by Mascia Toussaint (Enquiryra)	26
9.2 Rating Assessment in Serious Games by Vinny Wade (ADAPT Centre at Trinity College Dublin)	26
9.3 Accreditation into Action: Keeping It Real in the 4 th Revolution by Stephen Rice (Upskill)	26
10 GENDER: CHALLENGES AND BENEFITS	28
10.1 Gender as a Hindrance to Peace by Tom Digby (Springfield College)	28
10.2 Contributing to mainstreaming gender in training by Charlotta Ahlmark (European Security and Defence College)	28
10.3 Gendering peace by Gillian Wylie (Trinity College Dublin)	29
11 OPPORTUNITY TO PLAY THE GAME, RECEPTION FOR PEACEKEEPERS AND MOVIE SCREENING	31
11.1 Game Bazaar	31
11.2 Reception for Peacekeepers	31
11.3 Movie Screening - A Journey Of A Thousand Miles: Peacekeepers	33
12 CURRICULUM FOR TRAINING CIVILIANS ON COMPLEX MISSIONS	34
12.1 EU Strategic Training Needs Assessment EU-STNA 2019-2021 by Vera Pavinska (CEPOL)	34
12.2 Influence and Authority in Adult Learning by Josef Reiterer (UN OCHA)	34



12.3 Posing or Posture? Soft Skills for Hard Mandates by Silva Lauffer (ENTRI project).....	35
13 EXPLORING ALTERNATIVES IN LEARNING THROUGH GAMING - DESIGN AND SKILLS	36
12.1 Four Dimensions of Learning in the Gamified “Introduction to Cultural Awareness” eCourse by Małgorzata Gawlik-Kobylińska.....	36
12.2 Unlocking the “Good” Ending: What Video Games Teach Us About Sustainable Peace by Gene Carolan ...	37
12.3 The Skills of Peace Building – From Dialogue to Design by Michael Cooke.....	37
14 CONCLUSIONS	39
APPENDIX 1 Guest Speech by Major General Michael Beary (Retd.).....	40
APPENDIX 2 Guest Speech by Dirk Dubois	43
APPENDIX 3 Guest speech given by Maria Mekri	47
APPENDIX 4 Conference Programme	50
APPENDIX 5 Press Release	53
ANNEX Task 7.7 Exploitation Strategy	56

FIGURES

Figure 1: GAP Conference Attendee Pack.....	6
Figure 2: Opening speech by Prof. Anne Holohan	8
Figure 3: Prof. Anne Holohan opening the Reception (photo Defence Forces Press Office)	32
Figure 4: Major Ganeral Michael Beary with members of IUNVA (photo Defence Forces Press Office).....	33
Figure 5: Major General Michael Beary giving his speach (photo Defence Forces Press Office)	41
Figure 6: Dirk Dubois giving his speach (photo Defence Forces Press Office).....	45
Figure 7: Maria Mekri giving her speach (photo Defence Forces Press Office).....	47



EXECUTIVE SUMMARY

The GAP (Gaming for Peace) Soft skills summit was held in Dublin, from 10 to 11th January 2019. The objective of the conference was to present GAP project findings on soft skills, how curriculum and game development has progressed, and to bring other aspects of training needs and training delivery practices when preparing personnel to CPPB (Conflict Prevention and Peace Building) missions. The conference gathered more than one hundred twenty experts working with training and education in peacebuilding from academia, policymaking and training institutes (civilian, police, military).

The diversity between organizations, such as militaries, police forces and NGO's as well as diversity between nations, gender and cultures makes it challenging to communicate and cooperate in conflict prevention and peacebuilding operations. Therefore, there is a need to promote communication skills, cultural awareness and gender sensitivity, and all this requires certain amount of empathy. Exercising these skills is essential and that is why GAP project has developed an innovative base curriculum and tool (game) to practice these skills. The game is an innovative tool for delivering training and a new model of curriculum has been tested in the pilot course.

The summit was fostering the knowledge created in the project and participants expressed their satisfaction to the summit in various discussions and workshops. Organisers and other consortium members see that there is a specific need and place to continue organizing specific events dedicated for improving soft skills. Peacekeeping practitioners buy this idea and therefore it could be further examined whether global Peacekeeping training summit: International Association of Peacekeeping Training Centres (IAPTC) would like to include this topic in its forthcoming annual conference. The conference programme consisted of plenary sessions and specialized workshops. The summit discussed on topics such as training needs on soft skills and utilisation of simulation and gamification to address the identified needs.



1 INTRODUCTION

The GAP project aims to meet with the challenges to work more effective together in peacekeeping environment. In order to meet with the challenges, project has developed training curriculum and a virtual game for peacekeepers to better learn soft skills.

Project researchers have followed ethnographic research methods to analyse the cooperation among civilian, military and police. Researchers interviewed peacekeeping practitioners and conducted a rigorous assessment of current knowledge and existing training related to conflict prevention and peace building in order to capture current best practice. Through broad consultation and review of relevant documentation the project identified current gaps in training for the soft skills needed to perform successfully in multicultural peacekeeping environment.

A journey of successful work among GAP Consortium and with several stakeholders is almost completed. The GAP game has come to the cutting edge in the domains of training for peacekeeping, curriculum development, soft skills, assessment, game design and soft skills standardization. Therefore the GAP consortium organised a soft skills summit to share experiences and to learn from peers of the challenges how to best train soft skills in peacekeeping environment

The summit was preceded by pilot course of soft skills, conducted under the auspices of the European Security and Defence College. The course utilised gamified methods by playing the trial version of GAP Game. Playing the GAP game has also been made possible free of charge through the GAP website.

This report follows the same structure as the summit. The plenaries discuss on topics such as training needs on soft skills and utilisation of simulation and gamification to address the identified needs. After the plenaries, audience had possibility to choose workshop based on their interest. The programme of the conference is presented in the annex of this report.



Figure 1: GAP Conference Attendee Pack



Attendee packs contained:

- Map of TCD campus
- GAP pen
- GAP notepad
- Gap folder
- Tourist map of Dublin
- Copy of Conference Programme

2 OPENING SPEECH: FILLING THE GAP

Project Coordinator Anne Holohan opened first day of GAP Soft Skills Summit with a presentation of overall purpose and summary of the GAP project. After welcoming everybody on board, Holohan continued with a presentation Filling the GAP: A Model Using Real World Experiences to Develop Scenarios and Learning Objectives for a Serious Game which has Inbuilt and Standardized Assessment, accompanied by Prof. Vincent Wade, Adapt Centre, Trinity College Dublin and Dr Mads Haahr, CEO and Creative Director, Haunted Planet Studios.

Holohan begun her presentation by introducing the partners working in GAP project and continued by issuing the challenge that lead into initiation of GAP project. She told that diversity between organizations, such as militaries, police forces and NGO's as well as diversity between nations, gender and cultures makes it challenging to communicate and cooperate in conflict prevention and peacebuilding operations. She also stated that the current training for peacekeepers doesn't emphasize enough the importance of soft skills. Next Holohan presented the genesis of GAP, which is based on her own field research on the personnel in UN missions in Haiti and Kosovo, her research on the role of gamification in citizen science as well as other fields and her research on digital role-playing with implications for gender and culture.

For GAP the key soft skills in conflict prevention and peacebuilding were identified and verified through interviews of 180 peacekeepers. Based on the results the seven core soft skills in CPPB missions are communication, gender awareness, cultural awareness, decision-making and leadership, cooperation, stress management and empathy. These skills were the learning objectives embedded in the stories and scenarios of the GAP role-playing game. In her presentation, Holohan went through all the soft skills one by one, pointing out the focal points of each skill and explained how they were taken into consideration in game design. For example, empathy is involved through so called Proteus effect, which basically means taking another person's character. In GAP, when civilian plays as a soldier or a man plays as a woman, the player needs to look the situations from another person's perspective and imagine how would he/she act and feel.



Holohan ended her presentation with the game delivery and assessment. The delivery of GAP consists of both out-game and in-game parts, and the assessment in both includes pre-play quiz, play game with learning objectives embedded in story, post-play quiz and reflection/discussion. The learning objectives of GAP are benchmarked to international standards and accreditation bodies, and the quizzes main purpose is to help each person to identify cultural, gender and communication blind spots. By addressing these it's possible to evaluate if the game can help with them. Each player also get score and breakdown of scores from each part as a feedback and the game also provides link to learning materials from all key agencies and resources.

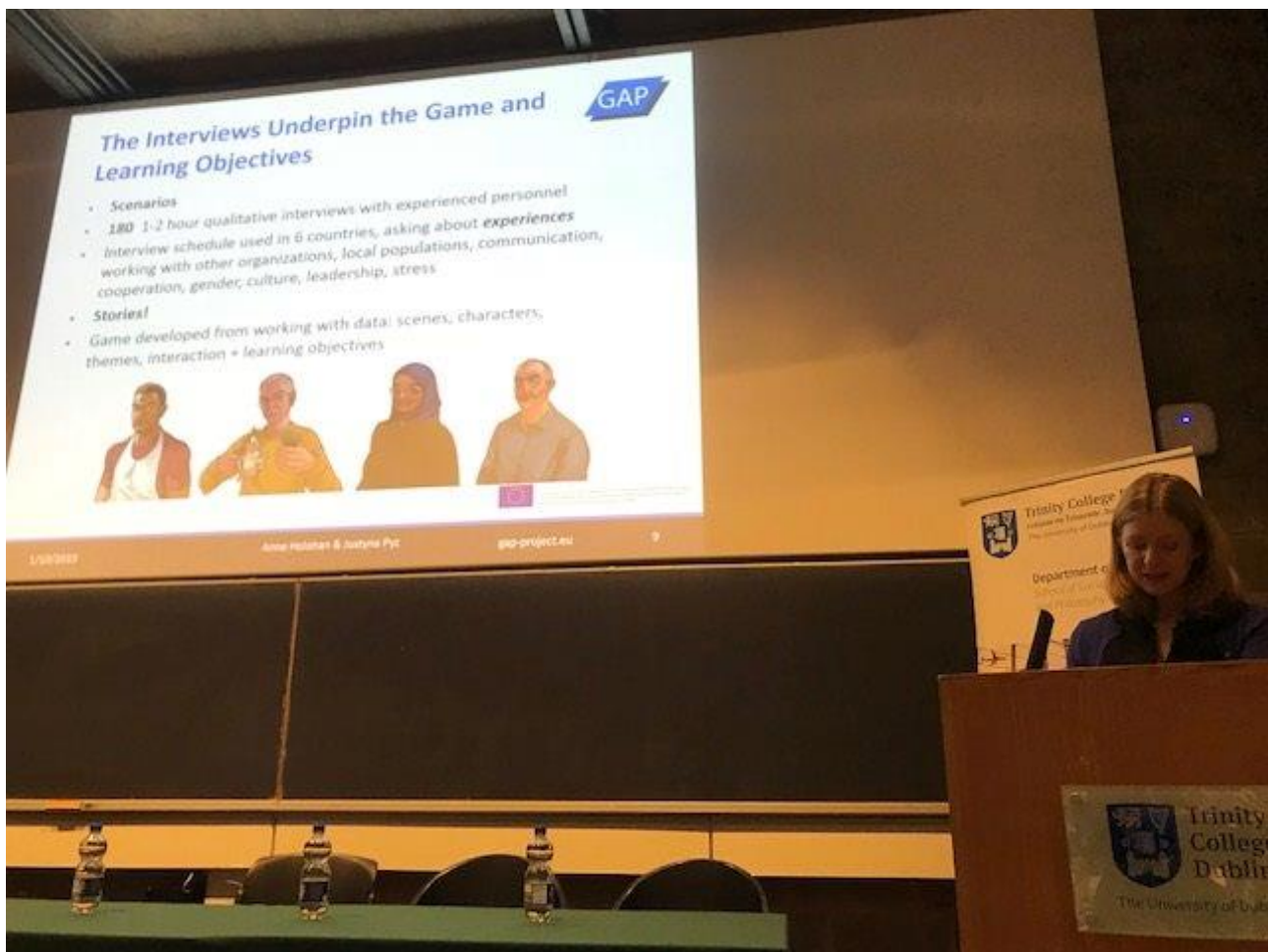


Figure 2: Opening speech by Prof. Anne Holohan

Prof. Vincent Wade, Adapt Centre, Trinity College Dublin continued and went more in detail of in-game assessment as well as requirements and challenges of GAP. He also told about the benefits of role-play simulation in education and the characteristics of role-play game in context of training conflict prevention and peacebuilding personnel.



The in-game assessment of GAP includes monitoring of behaviours, progression, achievement, timing, actions and decisions etc. By doing this, it is possible to measure the level of learning, the increase in skills and awareness of the player as well as evaluate the effectiveness of game. As GAP is so called serious game and purpose of it is to get players engaged in learning through playing. According to Prof. Wade, one of the benefits of role-play gaming is that the player needs to participate and take an active role in the story, which promotes higher learner motivation and engagement. It is also more effective and less time consuming than real-life training. Compared with the results of pre-game quiz, it can expose the difference between what the participants say they would behave and what they actually do in context.

The in-game assessment has plenty of challenges. First, the GAP conflict prevention and peacebuilding competencies need to be identified, and then, they need to be demonstrated in the game scenes and decision points. It is difficult to map observable rated behaviours and competencies and define high level learning outcomes in specific contexts applicable for all stakeholder such as game designers, CPPB experts, researchers and educationalists. There's also need for rating and analysis method for aggregated scoring and performance feedback reports. The rating system needs to be fully customisable by training managers, and the management need to hold required competencies in use of the system.

Wade presented the GAP in-game reporting assessment, which provides the learner with feedback, performance summary across each CPPB soft skill and offers the possibility to go through individualized results for selected scenes in game. For tutor it gives access to comparative summary across cohort of learners and performance of individual learners. Wade ended his presentation with an example from the GAP game, where a specific situation was described, and all the possible decisions were shown and the feedback was given according to the selected option. From the picture it was also visible how many players had selected each option.

After Prof. Wade, Dr Mads Haahr, CEO and Creative Director, Haunted Planet Studios gave a brief demo presentation of the GAP game. Haahr showed the audience a short scene of the game, where a Finnish female soldier was deployed to a conflict zone, in an imaginary state. He presented how the game is played and asked audience to vote for what option they wanted to select in various situations. Haahr highlighted that in game design their objective was to stay as close to a reality as possible. The game delivery and the storyline were elaborated in the following discussion, between the audience and all the speakers.

The session was closed with a discussion emphasizing that the demo presentation was just a small cut from the game, as the audience wanted to know more about the storyline and what kind of background information the player has before being deployed,. Haahr informed the audience that there is a narrative start, and player gets the needed background information while playing it through.

The questions related to nationalities in the game were raised by the audience. Dr Haahr answered the question from game developer's perspective and highlighted the importance of details and specifics of the character, it to be easier to relate. Prof. Holohan continued from this by



saying that it is essential to have nationalities, since cultural differences are one of the main factors in the game and it also helps in training empathy skills. There was also a note from the audience that the game developers should be very careful with the content and it is essential to have only correct and authentic background information brought into the game. Holohan answered this by telling that the developers are aware of the complexity of the set-up and they are putting a lot of effort for on-going development according the results and feedback obtained. Wade added to this, that in the pilot course of GAP in the beginning of January, these same questions and feedback came up and it is taken into consideration in future phases of GAP.



4 A CURRICULUM FOR THE ROLE OF POLICE IN PEACEKEEPING

First break out parallel session was chaired by Ms Maire Braniff, University of Ulster, and the discussants were Walentyna Trzcińska, Markus Feilke and Peter McCutcheon.

4.1 Police Officers on Peacekeeping Missions – Their Tasks and Preparation by Walentyna Trzcińska (WSPOL)

Trzcińska discussed the role of police officers on peacekeeping missions, and their tasks and preparation. She began by highlighting the importance of separation of the fighting parties and that peace has to be built. She continued to note that though the roots of the conflict may be hidden, but they may still be alive. Post conflict situations can be very difficult, with many displaced people, little available food, medicine and employment. The average duration of peacekeeping missions is 15 years and there are many weapons and many people, who have only been soldiers and are not qualified to work.

Trzcińska pointed out that the police force is weak, ineffective or even nonexistent. There is no one to fight crime, and people do not trust each other, so strengthening the rule of law is key. Especially important are strengthening the position of those people who are in the weakest position, such as women and children, disarmament, the restoration of authority, trust building, and re-construction of the justice system, and not just the police but the entire justice system.

Of the personnel of peacekeeping missions, run by the United Nations and some regional collaboration bodies, 10.785 or 12 % are police, of which 1.305 are women. Police serve in two roles, either as individual police officers (IPO) or in Formed police units (FPU), IPOs are unarmed and they advise, mentor, train, and support the host state police and its community policing. FPU are armed and they work in international mixed teams. FPU units protect mission personnel and facilities, uphold public order, and support police operations, local courts, and other targets that require concentrated response.

Trzcińska saw that training police officers for peacekeeping mission is a challenge. They have many tasks and work in very difficult, dangerous environments. It is very different to patrol in post crisis conditions than in the normal conditions that the police officers are used to and this requires a lot of training. But on the other hand she pointed out that there is pressure to train quickly and cheaply. The deployed police officers training is also very task oriented, and it does not cover how to talk to people and to understand the cultures of other countries.

Pre-deployment training is done in each sending country or in UN training centers and induction training is performed on site. The presenter stressed that there is a need for continuous training. The training for both IPOs and FPUs starts the same but it is differentiated in a two-week module. IPOs, for example, learn rules of cooperation with key mission partners and principles on how to



reform and restructure and monitor law enforcement agencies, while FPU's mainly learn tactical skills.

Currently there is no European wide curricula for training, as each country does this in their own way. Besides national law enforcement agencies, ESDC and CEPOL provide courses and training projects. The discussion after the presentation noted that soft skills are much more important for IPOs, as FPU's work in groups and have the support of their groups. IPOs, on the other hand work alone and their work is all based on communication with the people in the host country.

4.2 The Importance of Training on Soft Skills for Police Officers Deployed to International Peace Operations by Markus Feilke (German Federal Police)

Markus Feilke from the German Federal Police discussed the importance of training on soft skills for police officers, who are deployed to international peace operations. Feilke has personal experience from deployment in Afghanistan, Brussels (as an expert and coordination), and Liberia. He has worked for 10 years at the (UN certified) police academy.

The presenter noted that, in his experience, there has been a shift from purely technical training toward how to work with people. He discussed that because police meet with both military and civilian representatives their training is generic for both IPOs and FPU's.

Experts and leaders are selected based on their good performance at home, but even despite this they may end up not performing so well on mission. The presenter pointed out to take into consideration that there is a transition from a national context to an international context; the work changes from independent taking of action and solving problems to advisory mentorship. This is a huge change.

The challenge for training organizations is that teams at home in, which people are used to working for, are homogeneous, with one organizational culture. In Liberia The presenter's team had 12 people from 11 different countries; and organizational cultures, which one has to work with to perform well. According to the presenter, there are many hidden team conflicts, which are not talked about much. Thus, the transition from a national context to a multi-cultural context needs more attention.

Much focus is put on training collaboration with counter parts, but training to for working in multi-cultural teams, and to apply leadership are often forgotten. Primary focus is put on management (hard skills), while more has to be done on Leadership (soft skills); topics that are not in the mission CONOPS or operational-plan.

The concept of train the trainer is well known, but not concept of how to train advisors, in which both hard and soft skills are important. It is one thing to be aware of cultures, but another to use it. Intercultural communication is, in the mind of the presenter, the key. Gender is everywhere and it determines how to approach any situation, as do values.



A shift in methodology is needed. Training should move from lecture based, which works for management training, to more interactive methodology, such as games, group work, exercises, creativity, modelling, dialog walk, which all benefit soft skills training. Learning results are best, when you connect emotions with the content; and this can be done with these interactive methods, just as children learn by touching and tasting everything.

German leadership training methodology is based on invites the self-reflection of experienced leaders, followed by theory based interactive methods (e.g. modelling, exercises, role plays), where most of the content comes from the participants. This prepares for work on a mission as an individual working on international teams. This is done more and more, but still enough time is not spent on it.

The minimum training for German police is 3 weeks, and it can be up to 6 weeks. A problem is that during this time these people are out from their normal duties. Work has to be done to convince that training is necessary to make the transition from a national context to an international context.

The discussion on changes and assessment methods discussed how to evaluate training. It was noted that mostly we ask colleagues was there enough training and how did it work, etc. A one-week de-briefing is mandatory after deployment. The presenter told that when he had gone to Afghanistan, there was no training for mentoring, however it would have been good to get such training before going on his first mission.

The German police do not use games for training, but the presenter agreed that it is one methodology that could be used. Learning methods have changed and younger people are used to playing games and there is less resistance. Also, when the older generation police experience methods, such as playing games or painting, they notice it is fun. Globalization was also discussed, and it was noted that it is more normal for young people. The German police invite international participants to courses to provide diversity already in the training phase.

4.3 Policing Lessons from Kosovo by Peter McCutcheon (PSNI)

Peter McCutcheon (PSNI) discussed policing lessons from Kosovo. McCutcheon provided a personal angle from his own deployment in Kosovo. His deployment was the first of its kind for the Police Service of Northern Ireland (PSNI), and the presenter noted that it was quite a learning curve also for PSNI, which has a very long tradition of policing. PSNI history dates back all the way to 1814, it was the first uniformed police service in the world. What is notable is that PSNI also has a history with political and religiously divided community, which is very similar to Kosovo, also is about the size Northern Ireland and also with a long history of religious and national division.

Training for UN Interim Administration missions lasted for three weeks and it included firearms training, conflict resolution skills (continuum of force – you start with soft skills and if needed



respond even with force; the environment may be very dangerous), first aid, search training, police order, and applied the four pillars of governance. The police lived in the Serbian area and worked in the Albanian area or vice versa, so border crossings were a daily event, as were seeing destroyed villages, the risk of land mines, and rock falls. Even simple things such as court security was enforced with armored vehicles and police patrols. The presenter found the Muslim environment very new but felt that coming from Northern Ireland helped understand the issues and arguments by both sides, without taking any sides. At that time 30 % of Serbs lived in the North in Kosovar and the rest were scattered around the country, and there were still some retribution attacks by Albanians toward Serbian villages.

The presenter found the experience of working in an international team interesting. He felt that the training and his knowledge of PSNI tactics helped when patrolling the North and working with special police units (SPUs). Language was an issue when working with a Ukrainian unit. The presenter noted that interpreters were a good way of getting to know locals. The presenter had very good experiences with NGOs.



5 GAME-BASED SOFT SKILLS LEARNING IN DIFFERENT SECTORS

Second break out parallel session consisted of sessions by Janet Benson and Ciara Kennedy.

5.1 Game-Based Learning into Today's Workplace: Who's Winning? by Janet Benson (Learnovate, TCD)

Janet Benson works in the Learnovate Centre, which is a research and innovation environment for educational and learning technologies. Learnovate combines knowledge from various fields such as learning science, technology, user-centric product design and customer-centric innovation. Benson herself is an expert in corporate and adult learning. In her presentation, Benson discussed opportunities and challenges of the game-based learning in the workplace context.

Benson saw that the eLearning has promised radical change in workplace learning. Number of opportunities in applying technologies in learning exist including gamification, micro-learning and mobile learning. For learners eLearning enable working at their own pace and promotes motivation as well as joy of learning. In order to achieve evolving results, a number of companies have implemented leaderboards, badges and challenges to their employees.

The presenter pointed out that game-based learning in workplace context promotes motivation, autonomy, relevance, engagement and problem solving. The game-based learning enables experimental and collaborative learning. According to the presenter, there is scientific evidence that compared to other methods simulation games deliver higher post-training self-efficacy and declarative knowledge.

As an example of game-based learning in workplace environment, the presenter introduced the Time Management Game, which is used for example in Burger King and Fujitsu. An idea of the game is to help employees in fast-paced jobs to manage their workload. By playing the game employee learns how to be more productive in his or her tasks.

Benson pointed out that even experiences of game-based learning in the workplaces are mainly very encouraging, there is also need for a critical reflection. For some individuals it might be confusing to see playing game and working in a same context. Games are seen as part of free time and enjoyment, not belonging as part of a working life. This confusion may interfere game-based learning of some employees. There has been also critical reflections related to the cost-time-resource parallelism. Sometimes resistance against game-based learning may be related to the general resistance to change.

The presenter highlighted that the game-based learning is not a "one size fits all" solution in the workplace learning. Successful use of the game-based learning requires careful planning, piloting and further development of the product. Benson also brought up that games can create losers.



This should be avoided by planning games so, that everyone can achieve experiences of learning. It is essential also to highlight that fun is not the ultimate end goal of using the game-based learning. There has to be clear learning objective that is communicated intelligibly.

5.2 Unlocking the Imagination, Creativity, Empathy & Innovation – Gaming for Environmental & Inner Peace by Ciara Kennedy (AnimaVenture)

Ciara Kennedy is the founder of AnimaVenture, a company that provides game-based solutions for imagination promotion. The company has two main products: meditative journeys and story game. The meditative journeys offer 19 different journeys that promote users' imagination and planetary health. The story game is a gaming application that enables sharing experiences and ideas bringing these to life in collaboration with peer players. According to Kennedy, the deepest objective in both - meditative journeys and story game - is to enable environmental and inner peace. Theoretical premises are in authentic learning, transformative learning, social constructionism, flow theory and in situated learning theory. Kennedy highlights that the gaming is an effective method for teaching empathy, creativity, innovation, problem solving and wellbeing.

The presenter introduced the concept of Peace Education. According to Kennedy "Peace Education is any holistic, multidisciplinary and transformative educational activity that aids competence development for living and building peace". The true peace is combination of inner peace, social peace and environmental peace. Competence framework for the Peace Education includes: 1) Living in peace with other living beings and the environment and 2) Building peace by implementing peacebuilding activities.

Kennedy noted that the game-based learning enables development of empathy and compassion, transformation of attitudes and creating change. These are some of the key elements of living in peace. Building peace, in turn, takes place through creating shared visions for living in harmony with other people and environment. All of the foregoing can be learned through gaming.



6 CULTURE AS A RESOURCE

Third break out parallel session was chaired by Dr Justyna Pyz from Trinity College and the discussants were Ryszard Szpyra, Yvonne Masakowski and Livingstone Thompson.

6.1 Cross-Cultural Competence in GAP by Ryszard Szpyra (Polish National Defense University)

Ryszard Szpyra's speech from the Polish National Defense University told what they did in the cross-cultural competence realm of the GAP project. They were responsible for conducting the regional assessment and testing, along with the cultural and gender aspects of the research together with TCD.

Professor Szpyra presented the speech on behalf of Dr Trochowska. Dr Trochowska is a civilian cultural specialist working for the military, and as her background is rooted in cultural anthropology, she performed interdisciplinary field research at the Lakota Standing Rock Reservation in South Dakota, United States (2008), Palestinian Yarmouk Refugee Camp in Damascus, Syria (2010), Turkish police and military institutions (2011), American military institutions – US Army War College and US Central Command (2012) and Joint Special Operations University, USAWC, West Point, NATO ACT and US Naval War College (2015), and Ukraine (since 2016) on cultural aspects of security and defense.

According to Professor Szpyra, it might seem that once one left Iraq and Afghanistan, and since the operations run nowadays are far from the full-scale boots on the ground engagement, culture is no longer an issue. However, their initial assessment performer for GAP, the works of the Leaders Development for NATO multinational ops group that professor Masakowski runs, and even the field work done in the Ukraine by Dr Trochowska in the context of the Donbass conflict proves that culture still does matter. In particular, that in our understanding culture determines a mindset and embraces everything, from what people drink for breakfast to how they perceive fake news. And it all has operational significance.

The presenter explained that to be able to operationalize it all and make good use of in the game, they applied the following methodology: first they did the doctrinal and status quo review in all the countries. Then they performed extended, semi-structured interviews with police, military and civilian participants using the questions on the right – but the cultural sensitivity elements were also included in the communication, cooperation, gender and trust questions. They coded them and joined the results with field work and educational experience they all have. Then they organized focus groups to assess cultural elements in the scenarios and the game itself, ending with a good cross-cultural competence training layer of the game.

Their initial assessment was really gripping, similar to the First Earth Battalion investigation from the "Men who Stare at Goats," and proved that first of all, culture is stressed as one of the crucial operational aspects – be it the AOO culture, the organizational cultures of different entities one



has to work with, along with specific national cultures of a multinational contingent. At the same time, the PDT training does not cover the complexity of the cultural influences sufficiently. And in particular in the EU context they worked for, there is a growing demand of cross-cultural competence in efficient management of CSDP, also due to the specificity of CSDP activities that demand more universal skills than single-serving regional expertise. And that there are problems not only with culturally alien AO, but also with cultural variety within a given contingent (sadly, interoperability is a myth).

Professor Szpyra continued, saying that what they found was that cross-cultural competence was the only skill covered in every PDT training – with various intensity and effects. Also, they discovered many problems with interagency cooperation (with civilian-military-police organizational cultures differences even within one nation!) and cross-cultural competence issues, both when it comes to a multicultural contingent and the culturally different AO. As one of the interviewees put it: I thought it will be the Iraqi we will have trouble with, but the most challenges came from working with American personnel! Also, there is an evident gap between abundant ethnographic knowledge/expertise and practical activities: training, military education, planning and conduct of operations. And the “why bother?” attitude does not help. In multicultural societies, such as the US, cultural competence is believed to be already a norm (which is wrong), in culturally homogenous societies such as Poland, it is believed as redundant anyhow (wrong again). And funding in security and defense realm – soft skills are considered as less important than “hard” tactical skills.

Moreover, some countries suffered from insufficient training (when it comes to the time, methods and merit) ran by unprepared civilian experts who might be brilliant in their field but are unable to tailor their expertise to specific mission needs. Concerning the trainees: lack of cultural self-awareness and susceptibility to stereotypes did not help, in particular that the training materials were also not of such high quality. But in the absence of certain skills or properly tailored training, social learning and informal exchange of experiences fixed a lot, together with interpreters. Those, however, had to be really trusted since they are kind of double-edged sword, literally. They also received numerous pieces of advice on how the training curriculum and the game should look like – from Focus on practical skills to the importance of profound training of everybody that would be deployed.

There are also certain implications for the game design itself, drawn from cultural neurobio research. Apart from the obvious culturally-informed content and narratives selection issue, there are several other implications, among others:

- Gender-based perspectives and other cultural variables influence the perception and behavior in VR environment,
- Cross-cultural neuroscience evidence: differences in gaming approaches and cognitive perception of VR include: Visual perception – holistic v. analytical, decoding 3D in 2D representations, attention - focal v. contextual, processing narratives; coding and decoding of mental states from facial expressions; memory: context v. object, literacy, reminiscence



bump, affective domain (mnemonic reinforcements); motivation (group or individual, non-western andragogy: holistic, lifelong and communal); the perception of the avatar and the extent to which the Proteus effect will be realized.

Professor Szpyra concluded with an interesting cultural finding. What became evident during the research, is the importance of cultural dimension and resulting from its perception of gender roles, since it gives a framework for understanding and interpreting the research results.

6.2 Developing Global Leaders with Cross-Cultural Competency by Yvonne Masakowski (Naval War College in Newport)

Dr Yvonne Masakowski works at the Naval War College in Newport, Rhode Island, USA. Her presentation focused on the importance of cross-cultural competency in life and especially in working life, not to mention also among leaders. Her own background derives from many cultures as well. Professor Masakowski spoke about military cross-cultural competence, language, culture and communication. She also discussed about rapport building and how important it is to build relationships based on trust and respect. If one considers cultural perspectives, one needs to understand that there are differences in thinking – there are the western and non-western perspectives. The western perspective looks at political solutions and arbitration, and avoids warfare, and resolves conflicts. The non-western perspective approaches issues patiently, applying a long-term view.

The presenter pointed out that it is important to see oneself in the eyes of other people. Cultural differences exist, both behavioral, value-related, and cognitive differences. The behavioral differences include, for example, languages, behaviors, social rules and customs which are associated with so-called national cultures. The differences in values refer to cultural values which are passed on from one generation to the following one. Cognitive differences appear in cognition which are important when achieving shared situational awareness and understanding. According to Professor Masakowski, communication reflects our cultural values, and the ability to communicate across cultural divides is a key strategic leadership characteristic. Professor Masakowski explained that the art of Active Listening can be defined in the steps of listening, engaging, asking questions, paraphrasing and summarizing (LEAPS).

In addition, the presenter explained mental models and schemas. These are cognitive representational structures that help in the storage of information. They also aid in the retrieval of information. Schemas describe the way information can be structured for retrieval. One should also be aware of cultural differences in behaviors, values and ideologies. Leaders must build relationships based on trust and respect. Cultural awareness is critical for leadership effectiveness.



6.3 Steps Towards Building Effective Intercultural Relations by Livingstone Thompson (SIETAR)

Livingstone Thompson is an experienced intercultural trainer with specialties across a variety of corporate fields. As a member of the Irish Institute of Training and Development, Livingstone provides consultancy, research and training in cultural awareness and diversity management. He is a funder of Living Cultural Solutions, a consultancy that specializes in intercultural training, cultural awareness and cultural competence training, diversity awareness and management training. It provides support to businesses and organisations in how to optimise the benefit of cultural diversity to improve efficiency and productivity. Thompson's professional involvement includes serving as president of the Society for Intercultural Education, Training and Research (SIETAR) Europe.

His presentation was illustrative and engaged the participants into thinking of cultural awareness. His presentation began by introducing the case of Fons Trompenaar's car. It is an ethical case, where people need to think how they would choose if their friend is involved in a car accident and the friend asks them to lie for his sake.

Dr Thompson spoke of cultural lenses, bias, cultural differences, Hofstede's and Trompenaar's cultural dimensions, and how people see things differently depending on their cultural background. Communication styles play a role in cultural differences as well.



7 KEYNOTE SPEECH BY TOM DIGBY

Tom Digby is Professor Emeritus of Philosophy at Springfield College and has served as U.S. Advisory Editor of the journal *Men and Masculinities* since it was founded in 1998. He is the author of *Love & War: How Militarism Shapes Sexuality and Romance* (Winner, 2017 Choice Outstanding Academic Title, published by Columbia University Press).

Tom Digby's keynote speech was an illustrative presentation on his topic on how gender and militarism changes how masculinity and war are understood. He spoke about his book, *Love & War. How Militarism Shapes Sexuality and Romance*. Prof. Digby's presentation employed a lot of visuals. He spoke of how cultural programming influences the understanding of gender and gender roles, and how cultural militarism and violence are learned ways of a culture.

To understand war and peace requires understanding masculinity. Masculinity is reinforced by gaming. Everywhere it is a test of masculinity. Not only in militaristic cultures but even in Iceland the same qualities concern boys. Patterns in cultural programming of masculinity increase the risk of war and conflicts.

According to Tom Digby, men struggling financially are more likely to buy guns and military style guns, not to mention, large quantities of guns. Masculinity is an appropriation. Tom Digby pointed out that masculinity is defined by an absence, such as not female, not woman, etc. There is no positive quality that is unique for masculinity.



8 TRAINING NEEDS IN CONTEMPORARY PEACEKEEPING MISSIONS

Fourth breakout parallel session was chaired by Dr Kieran Doyle from Kennedy Institute and the discussants were Timothy O'Brien and Jonas Alberoth.

8.1 Pre Deployment Training by Timothy O'Brien (Defence Forces PSO)

Timothy O'Brien from the Irish Defense Forces discussed training needs in contemporary peacekeeping missions. He began by showing a MOAG-vehicle to point out the need for protection in the high-risk mission areas. He continued to describe the Irish military forces structure. The presenter made it very clear that the primary task for the forces is to defend Ireland should the need arise. In addition, the armed forces provide aid to the civil power (e.g. explosive and ordnance disposal, prisoner escorts, readiness to immediate response in cases such as terrorism), and support to government agencies when needed. The air core is also responsible of providing the police with an air wing and operating ambulance flight operations.

The Irish defense forces have had a continuous peacekeeping role since 1958, with a total record of 70.000 individual tours of duty during this time. Currently nearly 700 Irish serve on peacekeeping missions. Training for these personnel is provided by the United Nations Training School Ireland (UNTSI), which was founded in 1993 as part of the Military College. UNTSI captures best practices to provide need training programs, such as Pre-Deployment Training for the contingents to Lebanon and Syria, which is have a total training time of 3 months, where the first 4 weeks are at each soldier's home unit, but the main focus is on the following collective training held at UNTSI.

The other missions have three-week training programs that cover subjects such as medical, counter IED, mine awareness, CISM peer training, and soft skills, such as human rights, protection of civilians, code of conduct, all based on the respective lists of training focus of the mission governance (NATO, EU, ...). The presenter made it clear that it is no longer enough just to be a good soldier, but that soft skills training is also needed, to learn how to work with civilians and police. UNTSI aims to mainstream these concepts in the training that they provide.

The presenter valued a diverse participation already at the training stage in noting: "If you find yourself in a training with just one kind of audience, then you are in the wrong place". UNTSI provides training to military and police students from 20 different countries, showing that UNTSI has good training products. They also provide training for rapid corps staff and diplomats, also all their spouses and children, who travel with the diplomats, go through training in personal security and resilience.

As his final remark the presenter said: "I stress that we are a traditional military organization and that I am a soldier, and because I am a soldier, I can be a peacekeeper, but that is not who I am."



8.2 Focusing on Critical Needs – Soft Skills for Hard Results by Jonas Alberoth (Folke Bernadotte Academy (FBA))

The presentation by Jonas Alberoth from the Folke Bernadotte Academy (FBA) focused on critical needs, and the use of soft skills to achieve hard results. His approach was from a peace and crisis management perspective. He opened by asking who in the room had been to peace operations training; and if so, did it include soft skills; and if they felt that the soft skills part had been sufficient? Approximately half of the audience had had training and the soft skills mentioned were negotiation and communication, and cultural awareness. Several felt that there could have been more on soft skills.

The presenter discussed some practical examples of soft skills in, what he called peace operations that are either peacekeeping or civilian crisis management. The first example was from an exercise held in Bangladesh. There was a picture of rules for personal conduct for blue helmets, that the personnel from 32 different countries were asked to focus on. This shows a very strong emphasis on soft skills by highlighting concepts such as dignity and respect for other. The second example widened the concept of soft skills. It showed a high-level Muslim minister participating in a Serbian orthodox Easter celebration, and in so doing showing that he is the prime minister of all peoples. A nice example of a soft skills-based approach. The third example was of an emerging police department and TV-channel, which jointly created a television program that showed what professional police work is about and in doing so built trust between the citizens and the police authorities. Similarly, a simple but effective example was to open Police Academy training sessions to the public. There they could see the training and the police, which was very strong communication to the society.

The presenter noted that we must understand the representatives of the Security Council, what their interests and mandates are, and that despite all the politics and tactics in the Security Council, they have been able to significantly increase the number of resolutions and decrease the use of the veto. Never before have we done so much to resolve conflicts. The number of on-going missions is significant.

The presenter noted that multidimensional peacekeeping includes several competence areas that require soft skills to complete, where the people build on universal values. Peacekeeping is ultimately about the self-determination of the host nation. One example of this can be its first elections. There is a significant requirement on soft skills competences to aid the country. Cultural awareness is important; that we work to understand, and we work with the different parties in meaningful ways. The presenter noted that we should understand soft skills deficits, such as that there is cultural hatred and mistrust, which are why we need to develop the soft skills in the country. There is a significant culture of mistrust in the international organizations as well. One example was from Kongo. Police had been recruited from other parts of the country, and at night, when the UN withdrew, these police become perpetrators. In the morning, collaboration began again almost from the beginning.



The presented called for slightly more focus on how to build trust within the country; to communicate to build the platform toward self-determination. This was seen as a huge soft skills challenge, as are that missions are complex challenging, and hazardous, and that some receive little or no training on soft skills. Training is selective, and soft skills training may be in competition for the time needed to train other skills and core competences needed on the mission, as there is varying leadership awareness for these issues. Also one challenge that the presenter raised is that much of peacekeeping happens behind closed doors, as many deals, confidences, etc. happen in small groups. Researchers may miss the point in their results if they do not have access to the right sources. For these reasons GAP can serve as a bridge to the future.

Alberoth made the observation that most soft skills are from the previous professional lives and agreed with the selection of soft skills (communication, gender, culture) that GAP has made. However, he raised some issues that in his mind deserve our attention. These are motivation, pride, and that persons on mission understand what they represent. An example to the contrary was from a mission that had lasted for seven years and the commander felt that its staff did not understand why they were there. So he noted that it is important that people are aware this. Also, impartial empathy that is a genuine interest in people and relations are needed on missions, and thus, people should be made to understand that it is important to show empathy. They should also have abilities to make soft skills-based analysis, and openly include different parties. Understanding mission decision dynamics help align objectives and expectations.

The discussion after the presentation noted how these last-mentioned topics are a mix between attitude, skills, and knowledge. Relationships are the main point of peacekeeping and peacekeepers are there to understand the people, and thus, need to be able to facilitate, advise, and support; take initiative and drive within boundaries; show creativity to build soft skills in the country with a long-term approach

The discussion marked that we are good to remember that GAP is not just product development; it is also research and so can also induce more questions. One question was how to reconcile soft skills with being military officers. One commenter, with a military background, noted that he had never found it a conflict and did not feel that his military skills have deteriorated by peacekeeping. Another comment noted that serving as a liaison officer between the civilian population and military officers took more soft skills than he had ever needed. A third commenter noted that he saw no contradiction, none what so ever, between being military and empathy. Empathy can in fact raise the level of security in the country.

One notion that was brought up, was that also civilians should be trained, and that politicians have to be convinced of this aspect. Also, higher education was seen as key to better understanding soft skills. One comment raised the need to train soldiers and civilians in the use of social media, and another that in Ireland the training mainly focuses on tactical and operational levels as these are the levels that most people serve at. However, Ireland will have a new school that will address the strategic level by bringing together politicians, humanitarians, and military.



Peacekeepers should be mindful of and need to take into account the reasons for why the mission went in, and expectations for these missions have often been unrealistic. Soft skills have always been there, but they have become more awareness and more professional was noted by one discussion participant.



9 ASSESSMENT TOOLS TO IMPROVE ORGANISATIONAL EFFECTIVENESS

Fifth breakout parallel session was chaired by Dr Anne Holohan and discussants were Mascia Toussaint, Vinny Wade and Stephen Rice.

9.1 Tracking Soft Skills Learning at Individual and Organizational Level by Mascia Toussaint (Enquirya)

Mascia Toussaint from Enquirya discussed the topic “Tracking Soft Skills Learning at Individual and Organizational Level.” The importance of soft skills can be seen in tech companies. She pointed out that the best teams score high on soft skills, and seven out of eight key attributes for managers are so-called soft skills. The presenter explained about tracking soft skills and spoke about existing approaches. According to Mascia Toussaint, metrics do matter. There are survey questions that measure personality traits and behavioral skills, and group exercises with evaluators. However, there are risks of existing approaches. The GAP approach to track soft skills starts with the GAP game. There is a pre- and post-game assessment methodology as well as an in-game assessment. The GAP approach includes data collection with technology, dashboards at individual, team and organizational level, and data driven decision making. The presenter named a few challenges to tackle, which are a safe learning environment, legal use of data, and HR in the maturity of an organizational culture. Mascia Toussaint concluded her presentation by pointing out that it has been an insightful journey in a multinational environment, and that there is a need for sustainable tracking.

9.2 Rating Assessment in Serious Games by Vinny Wade (ADAPT Centre at Trinity College Dublin)

Professor Vincent Wade from the ADAPT Centre at Trinity College Dublin discussed CPPB Soft Skills Competency Assessment in Immersive Serious Games. He spoke of how constructive alignment is vital even in serious games. Professor Wade discussed the assessment in immersive serious games. The framework for assessment (Kirkpatrick’s) checks off the level of reaction, level of learning, level of transfer, and level of results. Challenges Professor Wade mentioned for in-game assessment in serious games include learning outcomes, and the need for game design to be aligned with both assessment methods and learning objectives. The approach for in-game assessment of decision-making, behavior, and utterance include the following: map particular in-game learner actions/decisions/utterances to learning outcomes; use behavior anchor rating scales; ensure reliability and validity of ARS ratings.

9.3 Accreditation into Action: Keeping It Real in the 4th Revolution by Stephen Rice (Upskill)



Stephen Rice from Upskill discussed accreditation in his presentation. He began with employer confidence, pointing out that lack of confidence and fear of change are the common barriers employers face when accepting new forms of qualification and accreditation. Mr Rice continued with recognition and accreditation, and mobility. He explained that on a personal level, increased labour mobility gives workers an opportunity to improve their financial situation. Restrictions placed on how workers may move around – either geographically or occupationally – can slow growth by making it more difficult for businesses to hire productive workers. Then, the presenter discussed unconscious bias, advocacy and promotion, and action.



10 GENDER: CHALLENGES AND BENEFITS

Sixth breakout parallel session was chaired by Yvonne Masakowski and the discussants were Tom Digby, Charlotta Ahlmark and Gillian Wylie.

10.1 Gender as a Hindrance to Peace by Tom Digby (Springfield College)

Tom Digby is Professor Emeritus of Philosophy at Springfield College. He has researched and taught gender issues for more than 30 years. Digby is the author of *Love & War: How Militarism Shapes Sexuality and Romance*. In his presentation Digby reflected and questioned the concept of masculinity in the context of conflict and war. As a philosopher, Digby opens perspectives and avoid giving easy answers.

Digby raised a question, why masculinity so often appears as lacking of something. For example, masculinity is often described as lacking softness, sensibility or tenderness. In the context of war, masculinity can be described as sacrificial behaviour. In extreme, a man sacrifices himself even until the death. This is seen as heroic for of masculinity.

The presenter also introduced the concept of warrior masculinity. The war is something masculine and men can confirm their masculinity by participating in the war. Weak masculinity can gain confirmation by involvement the war. Noteworthy is that going to the war is usually much more spectacular than returning home. Returning men are often wounded physically, mentally or both. In many cases going is easier than returning. Digby refers to resent public discussion on Iraq war; a large number of returning soldiers suffers from variety of psychosocial problems including post-traumatic stress disorder (PTSD). Many warriors find it difficult to adapt to everyday life after homecoming.

Digby raised the question on future warfare. What are the skills and capabilities that are needed in the future warfare? If the wars will increasingly take place in the virtual environments, what capabilities are essential for soldiers? Are nerds the future war heroes?

10.2 Contributing to mainstreaming gender in training by Charlotta Ahlmark (European Security and Defence College)

Charlotta Ahlmark is a training manager in The European Security and Defence College (ESCD). The ESCD provides training and education in the field of the Common Security and Defence Policy. Among other objectives ESCD provide training responding to training needs of the EU's Common Foreign and Security Policy missions and operations.



Ahlmark highlighted that the training ESCD implement is based on the European Union values: justice, solidarity, gender equality, non-discrimination, pluralism and respect for diversity. The presenter explained what EU Integrated Approach involves. The key elements of Integrated Approach are early warning, mediation, crisis response, stabilisation and security sector reform.

The presenter described the Common Security and Defence Policy as the European Union's "course of action in the fields of defence and crisis management, and a main component of the EU's Common Foreign and Security Policy". In operations and missions, there are three priorities: stabilising region, contributing to the resilience and enhancing responsiveness.

Ahlmark highlighted that EU has fundamental and extensive framework for gender issues. The framework is based on International Law and EU member states national legislations. Additionally, the EU policies, CSDP specific policy documents and mission specific policies include extensive directions for gender issues. In the summary the presenter noted that the framework is strong but the challenges emerge in implementation.

The presenter underlined the need of training in promoting gender awareness and development. The training for CSDP missions and operations must include sessions on human rights and gender in pre-deployment and in-mission. In addition, specialised training on Human Rights and gender thematic is needed. Ahlmark reminded that EU Policy on Training for CSDP from the year 2017 highlights gender integration in CSDP. The mandate for gender training and development is stable.

Ahlmark explained how the gender perspective is integrated in the CSDP missions and operations. Three key elements are participation, gender mainstreaming and protection. Awareness of the gender perspectives is essential competence for all who are participating missions and operations.

10.3 Gendering peace by Gillian Wylie (Trinity College Dublin)

Gillian Wylie is an assistant professor of international peace studies in Trinity College Dublin. Her research interests include migration, international politics and gender issues in context of war and peace. Her presentation focused on UN Security Council Resolution 1325 on women, peace and security (WPS). Wylie introduced Resolution 1325 and reflected its implementation in practice. The presentation also included critical reflections on implementation.

According the presenter WPS (see above) is the dominant approach to "gendering peace". The main idea of WPC is the recognition that peace is sustainable only if women are fully included. The peace in general and in global view is substantially linked with equality between women and men.

Wylie described pillars of Resolution 1325: participation, protection, prevention, relief and recovery. Participation of women is important at all levels of decision-making. This includes mechanisms for the prevention, management and resolutions of conflict. Participation calls women to take part in peace operations as soldiers, police and as Special Representatives of the



UN. Protection pillar refers especially protection of women and girls from sexual and gender-based violence. Improved intervention strategies are needed in the prevention of violence against women. Relief and recovery measures should be reviewed through gendered lens. For example, the gendered understanding is needed when refugee camps and settlements are established.

The presenter also pointed out limits of the WPS approach. Resolution 1325 positions women as victims or panacea. According Wylie both of the above are disadvantageous. The victim approach includes the idea that women are somehow passive objects. Approach does not promote active participation and involvement in peace activities. The panacea approach is not based on reality and positions women in an impossible challenge. Wylie stressed that women alone cannot build the peace, peace activities has to be collaborative and inclusive.

Wylie then explained what means “building gendered peace”. The concept involves three elements: 1) End direct violence (protection and prevention), 2) End cultural violence (challenge militarised masculinities) and 3) End structural violence (gender equality). The presenter highlighted that only the direct violence is visible. The cultural and structural violence are invisible forms of violence in societies.

At the end of the presentation, Wylie introduced the concept of positive peace. The positive peace means “presence of conditions of well-being and just relationships: social, economic, political and ecological”. Building gendered, positive peace is shared mission that requires the participation of all.



11 OPPORTUNITY TO PLAY THE GAME, RECEPTION FOR PEACEKEEPERS AND MOVIE SCREENING

11.1 Game Bazaar

The Summit included an hour opportunity to test and play the GAP Soft Skills Game in Games Bazaar. Launch of GAP Trial Game ensured the possibility for summit participants to received fruitful learning opportunity. The GAP Trial Game Version (for iOS) was also launch in GAP Website and public audience will be able to download and try the game free until end of February 2019.

List of individuals who showcased their work in the Games Bazaar

1. GAP Game Gaming For Peace
2. Green Sawdust/ Aapo Latvala: After Life - Story of a Father
3. Ciara Kennedy: Animaventure
4. Malgorzata Kobylinska: gamified e-learning course on Cultural Awareness (Prepared in SCORM Editor and launched on the ILIAS platform)
5. J.J. Quinlan: Matts Dilemma' - A game provoking discussion and reflection on rural isolation
6. Talita Holzer & Robbie Fryers (TCD): waytoB
7. Sean Carton/Kybolt games: Rise of Winterchill
8. Naoise Collins (DIT): GaeltechVR

11.2 Reception for Peacekeepers

Moreover, the summit participants and external guests were invited for Reception for Peacekeepers, which was attended by over a hundred guests. Three guest speeches were included in reception programme. Dirk Dubois (Director, European Security and Defence College) elaborated past and current status of peacekeeping in world context. Maria Mekri (Director, SaferGlobe, and Member of GAP External End User Advisory Board) introduced previous project results from peacebuilding operations and addressed the emerging need of soft skills, especially gender and cultural awareness, in all levels. Major General Michael Beary (former Head of UNIFIL) elaborated some former experiences as well as addressed the importance of peacekeeping in todays' world.

IUNVA (Irish United Nations Veterans Association) brought retired and serving peacekeepers to the reception, providing entertainment with their pipe band and set up a display on Irish Peacekeeping around the world in the Dining Hall. Garda Ladies Choir provided entertainment after the speeches.



Figure 3: Prof. Anne Holohan opening the Reception (photo Defence Forces Press Office)



Figure 4: Major General Michael Beary with members of IUNVA (photo Defence Forces Press Office)

11.3 Movie Screening - A Journey Of A Thousand Miles: Peacekeepers

"A Journey of A Thousand Miles: Peacekeepers" by Geeta Gandbhir and Sharmeen Obaid-Chinoy follows a unit of one hundred and sixty women who, between June 2013 and July 2014, travel far from their families, friends and all that is familiar at home in Bangladesh to join the United Nations Stabilising Mission in Haiti (MINUSTAH). They form one of the world's first all female, predominantly Muslim peacekeeping units; shattering every stereotype the world holds about the capabilities of Muslim women. The film focuses on three women from Bangladesh, who in this unit; grapple with the harsh realities of becoming foot soldiers in a United Nations Peacekeeping Mission. The film dramatically shows how this journey forever alters the lives of three courageous women and their families. Though faced with struggles abroad, the women are also given an authority and opportunity during deployment not yet possible in their own country. We witness first hand their return home and the subsequent reintegration into family life - a process that is at once a relief and a profound challenge. "A Journey of A Thousand Miles" is a bold look at the



women who make up this global force, going beyond the statistics and news stories to look at who these officers are on an individual level. Through the organic unfolding of their experiences during this year, the documentary defies the way we look at women from developing nations and asks the difficult questions that must be considered to better the global effort to build peace.

12 CURRICULUM FOR TRAINING CIVILIANS ON COMPLEX MISSIONS

Seventh breakout parallel session was chaired by Mr Petteri Taitto, Principal Scientist Laurea University of Applied Sciences. The chair opened the session by introducing panelist and presented the aim of the panel as “to further elaborate training needs in peacekeeping environment and how to address these emerging needs”. He explained that the panel is designed in a way that it covers experiences and practices from both EU and UN side. The panel is opened by presenting the results of CCEPOL Strategic Training Needs Analysis (STNA) by Vera Pavinska. After that Josef Reiterer from UN OCHA is discussing the method on how to include soft skills include using adult learning principles, and finally Silva Lauffer is giving the audience some examples from ENTRi project on how soft skills are addressed and what kind of training materials are available.

The chair continued by stressing that one of the CSDP Training Policy principles is that training is based on requirements, not events. These requirements are often times presented in the vacancy announcements, in EU case the Call for Contributions, where the basis for the softs skills requirements for EU CSDP missions and operations are defined, as vacancy announcements are called. According to the requirements personnel deploying to the missions should have excellent interpersonal skills and ability to work in multicultural teams

12.1 EU Strategic Training Needs Assessment EU-STNA 2019-2021 by Vera Pavinska (CEPOL)

Ms Pavinska introduced CEPOL briefly and then gave the statistics of the very comprehensive Strategic Training Needs Assessment (STNA) that they have been conducting over the last two years. The STNA has revealed number of training needs for the CSDP mission environment. One of the most important is that EU seem to lack a systematic training needs process. Therefore CEPOL has paid a lot of attention in creating process that will lead to systematic multi-annual process in the future. The assessment is still ongoing as the validity check, in the form of evaluation of the entire project will be conducted in the forthcoming year. One of the most important findings across the different sectors was the need to develop leadership skills and discussant pointed out that GAP-like solutions will certainly help addressing the needs in the leadership training.

12.2 Influence and Authority in Adult Learning by Josef Reiterer (UN OCHA)

Mr Josef Reiterer had three points in his intervention: Most common objectives, focus of the learner and focus of the instructor. As OCHA facilitates coordination in the humanitarian response



they emphasize the collective learning and networking in their events. Therefore the learning event most common objectives should be focusing on developing staff with a balance of expertise and versatility. Learning event should also have positive influence to other organizations, as it is often times the first impression of the OCHA as an actor. Any training also expands and cultivates networks and establishes global peer network of humanitarian aid workers.

Focus on the learner means respecting the learners professional and educational experience and emphasizes that the learner has the responsibility of the learning him/herself. Finally a good instructor should merely focus on the force multiplying and being an influencer than just amusing the participants.

Discussant concluded his intervention summing up that as the complexity of our operations increases, individuals are required to possess transferable competencies. Also instructors must become more ambitious in setting higher targets and influence is not a bad word for the instructor, as we do it all the time. And finally, learning must cause us turning our smartphones off once in a while.

[12.3 Posing or Posture? Soft Skills for Hard Mandates by Silva Lauffer \(ENTRi project\)](#)

Ms Silva Lauffer started her presentation by sharing personal experiences from field missions, in particular how important it is to be culturally aware. The training prior to the mission is therefore utmost important and it also provides an opportunity for self-reflection of personal bias and attitudes.

Ms Lauffer has been leading the ENTRi project for many years and project has developed curricula, conducted training courses, developed training materials and done training impact evaluation. Based on the project finding the identified training needs cover largely the same issues as GAP project has identified. The discussant listed topics such as: communication, Interpersonal skills, negotiation and mediation skills, stress resistance, cultural sensitivity and diversity, gender, working with minorities, teamwork, team building, leadership skills, analytical and reporting skills.

These identified needs can be addressed in various ways, but ENTRi project has found some good practices to best tackle these needs. Firstly, any learning event should be planned by using competency-based approach to teach and start communicating with trainees and trainers as early as possible. New technology enables this easily. Secondly, the diversity is an asset itself, and every participant brings added value to the learning event. Therefore, careful selection and immersive training of participants is important. Thirdly, as trainers are facilitators of learning, an adaptable methodology toolkit is useful for trainers. Lastly, assessment is important part of learning event. A comprehensive Peer Review System of course implementers can improve the quality of training event.



13 EXPLORING ALTERNATIVES IN LEARNING THROUGH GAMING – DESIGN AND SKILLS

The last breakout parallel session was chaired by Dr Justyna Pyz and the discussants were Małgorzata Gawlik-Kobylińska, Gene Carolan and Michael Cooke

12.1 Four Dimensions of Learning in the Gamified “Introduction to Cultural Awareness” eCourse by Małgorzata Gawlik-Kobylińska

Małgorzata Gawlik-Kobylińska works at the Command and Management Faculty, War Studies University in Warsaw. She participated in research projects from the fields of communication and media, educational technology for security and safety, and language education. Her most recent research concerns the four-dimensional instructional design.

Gawlik-Kobylińska talked about the Four Dimensions of learning, namely: Cognitive dimension, Emotional dimension, Social dimension and Psychomotor dimension.

The e-learning course “Introduction to Cultural Awareness” was designed in 2012 at the National Defence University: The target audience is military and civil personnel. Regarding the didactic process, the course can serve as: the medium to learn new situations, phenomena and processes; to illustrate oral information given by the teacher; to organize operational exercises; to support the examination of students’ knowledge. It is worth to mention that the course may also be used in programs of studies run in English. Due to its universal character, the course fits many different teaching programs. While planning this course, three basic dimensions of learning have been considered: cognitive level - textual layer, knowledge and abilities; influence level (it may be also called the “emotional level”) - individual attitudes, emotions, feelings that motivate the participant for further education; psychomotor level - triggers the action and physical movements (by commands such as: “move”, “click”, “drop”, “enter”). Social dimension can be also present when the forum or chat accompanies the course. The foundation of the applied in the course four dimensional instructional design (4D ID) was a learning theory developed by a Dutch scientist, Knud Illeris, who distinguished cognitive, emotional, and social processes of learning.



12.2 Unlocking the “Good” Ending: What Video Games Teach Us About Sustainable Peace by Gene Carolan

Gene Carolan is a Lecturer at the Dublin Institute of Technology's Aungier Street campus, where I lecture in European Human Rights, Asylum & Immigration Law, and Contract Law. His current research interest lie in peace agreements as legal documents, transitional justice mechanisms and conflict analyses.

Gene Carolan Talked about debates about the link between video games and violence that have almost become cliché. He noted that over the past decade, researchers have shifted their focus from video game violence to aggression and stated that studies typically code games as either violent or non-violent. She brought up studies that confirmed an association between violent gameplay and overt physical aggression and the fact that violent games have a negative impact on pro-social behaviour. At the same time tother studies show that pro-social themes encourage empathy and helping behaviour, but there is an lack of research on the pacific and pro-social themes explored in conventionally violent games.

He gave examples of how certain gameplay features can promote thinking and learning about conflict and peace, e.g., non-violence, the impact of violence, victimhood, accountability, justice, negotiation, dialogue, empathy and games that have been found to be an effective pedagogical tool in this regard. He mentioned researchers that have called for further inquiry as to how video games encourage perspective-taking and empathy.

12.3 The Skills of Peace Building – From Dialogue to Design by Michael Cooke

Dr Michael Cooke is Lecturer in Applied Psychology. He is primarily interested in the application of psychological and social scientific theories, methods, tools and knowledge to addressing the challenges and opportunities that face us in our everyday lives. This includes our working lives as well as our participation in society more broadly, ranging from local to international contexts of social interaction and engagement. As a researcher he is particularly interested in that specific set of challenges that we confront when interacting with technology. Technology is something that radically mediates how we interact with the physical, the social, the cultural worlds and of course the virtual. All of these aspects of life are part of our ecological systems and need to be explored in constructive and holistic ways and they have an impact not only on our behavioural, cognitive and emotional states, but also on our sense of identity and agency.

Dr Michael Cooke gave a talk entitled The Skills of Peacebuilding – From Dialogue to Design. This presentation argued that the key to understanding soft skills training lies in acknowledging that GAP is about the development of Dialogical Thinking. However, dialogical thinking is not a skill to be learned – it is a natural characteristic of the human mind, of language, of human activity, that needs to be acknowledged and reflected upon. Dialogue is what we are doing every moment



therefore need to become more aware of it. Soft skills training is about taking control of our own dialogical tendencies – it is as much about understanding ourselves than it is about the Other. Dialogue is more than empathy – dealing with entirety of context, social, cultural, and historical.

Dialogue is more than an add-on skill. All communication is dialogical. Monologue does not exist, however, we can tend towards monologue when we:

- Fail to acknowledge the other's presence;
- Fail to acknowledge the other's voice;
- Fail to acknowledge the other's perspective;
- Fail to acknowledge the other's value;
- Fail to act on the other's needs

The main value of the GAP project is not simply the fact that it trains players in soft skills to a measurable degree. Rather it is in the means by which this is achieved – through a process of unfinalized, value-laden, dialogical thinking where the boundary between selves and others is blurred. GAP places people in an unfamiliar environment requiring active gathering of data; Provides tension – emotional context; GAP requires complex decision-making that goes beyond the dialogue options available on screen; The process of game-play as part of a blended learning approach includes the dialogue with instructors as well as other players. It is not confined to the internal game dialogue; The situations are unfinalized – open ended dialogue; Brings to the fore values in the interaction including Emotional; Ethical; Aesthetic



14 CONCLUSIONS

The GAP Final Conference called “Soft Skills Summit” covered various aspects of learning soft skills in the context of peacekeeping and peacebuilding. Firstly, the summit identified training needs for soft skills. It was noteworthy that training needs presented by practitioner and academics were largely the same as identified in the project. Identified training needs stressed the importance of integrating gender perspective to all aspects of communication in the peacekeeping environment. Some of the key elements of gender mainstreaming are participation and protection. Awareness of the gender perspectives is essential competence for all who are participating missions and operations. Another point emphasized across the presentations was importance of building relationships that are based on trust and respect. If one considers cultural perspectives, one needs to understand that there are differences in thinking.

The summit had its focus on adult learning processes. Learning can be seen as a process that leads to somewhat permanent change in knowledge skills and attitudes. As adults learn in constructive processes, assessing the learning is important. In any learning process it is utmost important to recognize the existing level of knowledge and skills as a starting point. The GAP project has paid a lot of attention on how to assess learning before, during and after playing the game. In the GAP project the framework for assessment (Kirkpatrick’s) checks off the level of reaction, level of learning, level of transfer, and level of results. Constructive alignment is vital even in serious games. During the summit it became also evident that there are opportunities to utilize GAP game and game-based learning in general to improve performance in any workplace context. E-Learning has already promoted workplace learning and now gamification should even make it easier. Number of opportunities in applying technologies in learning exist including gamification, micro-learning and mobile learning. For learners eLearning enable working at their own pace and promotes motivation as well as joy of learning. In order to achieve evolving results, a number of companies have implemented leaderboards, badges and challenges to their employees.

The game-based learning in workplace context promotes motivation, autonomy, relevance, engagement and problem solving. The game-based learning enables experimental and collaborative learning. According to the presenter, there is scientific evidence that compared to other methods simulation games deliver higher post-training self-efficacy and declarative knowledge. GAP project has developed an innovative base curriculum and tool (game) for its successful delivery. The game is an innovative tool for delivering training and a new model of curriculum has been tested in the pilot course. The summit was fostering the knowledge created in the project and participants expressed their satisfaction to the summit in various discussions and workshops. Organisers and other consortium members see that there is a specific need and place to continue organizing specific events dedicated for improving soft skills. Peacekeeping practitioners buy this idea and therefore it could be further examined whether global Peacekeeping training summit: International Association of Peacekeeping Training Centres (IAPTC) would like to include this topic in its forthcoming annual conference.



APPENDIX 1 Guest Speech by Major General Michael Beary (Retd.)

Professor Anne Holohan Coordinator of the GAP project, Members of the GAP Consortium and my fellow speakers, Peacekeepers & Serious Gamers Military & Civilian, Distinguished Guests, Ladies & Gentlemen.

Thank you for inviting me to speak, it is special to have this opportunity to address you while I remain somewhat current following Command of UNIFIL in South Lebanon and previously the CSDP mission EUTM Somalia.

I will commence with a small tour of the crisis management horizon and I would suggest that Peacekeeping and Crisis management (CPPB) rests now in a period of uncertainty with questions over international commitment to such operations reflected in an ever-tightening budgetary environment. The rules based international order based on effective multilateralism cannot be taken for granted in this context given the trend toward isolationism, populism on the extreme L & R fringes and the rise of nationalism. Instability remains endemic worldwide it has not gone away – Africa (DRC, CAR, Mali) the Middle East with Yemen verging on famine, Syria and the Pal Territories, Central America, Venezuela all providing real challenges into the future. Real challenges that people such as yourselves will be asked to address.

I would therefore contend that the work you are undertaking is adding further important dept to the preparatory training completed by men and women prior to deployment to CPPB situations. It represents the “Icing on the Cake” to ensure personnel have the skills and knowledge to give them a real head start in bringing stability to a certain PK challenge. In your own terms and I quote:

Serious Game researchers agree on the value of games as tools to develop the skills needed in the complex knowledge society or the complex CPPB mission.

Supporting this need further, an unfortunate simple new phrase has entered the lexicon surrounding the deployment of PK/CM operations:

“A UN mission should do no harm”

Emanating from some poor UN experiences in Africa with SEA and in Haiti with the introduction of infectious disease. Your focus on the soft skills prior to deployment may not be as soft as you might think as Force Commanders have been removed over lack of attention to detail on such “soft skills” and I refer to Sexual Exploitation and Abuse. In undertaking a deeper examination of pre-deployment training EU members engaged with CSDP missions are generally well prepared and your work will fill that important GAP but other peace keeping nations are not so well prepared and in fact many have little or no engagement with pre-deployment training which can lead to real tragedy in the mission area particularly Africa. UN casualties have spiked, since 2013 over 195



(total 586 excl 2013)¹ personnel in UNPKOs have been killed by acts of violence, more than during any other 5-year period in history. This prompted the completion of the Lt Gen Santos Cruz report where he stated:

The United Nations has not fully adapted to modern hostile, operational environments and Security Council mandates. The United Nations lacks a conceptual approach as certain missions operate outside the governing principles of peacekeeping – consent, impartiality and use of force. N.B. The UN also lacks required supporting skill sets, and resource processes and mindset for delivering peace operations in modern, complex conflict environments and forceful Security Council mandates



Figure 5: Major General Michael Beary giving his speech (photo Defence Forces Press Office)

Here again your work can help to mitigate this by promoting a better understanding of the CM environment and all stakeholders concerned, contributing greatly not only to the force protection and security of both Military and Civilians deployed but also to the Protection of Civilians.

¹ Highest UN Mission fatalities are UNIFIL with 313 of which Ireland has 47 (Nov 18)



The EU has 17 military and civilian missions deployed worldwide (Nov 18) with approximately 7000 personnel². The UN has 106,338 civilian and military personnel dispersed among 15 UN missions³ at a cost of 7 billion (0.4% of worldwide military spending)⁴. This represents a significant international commitment by both the EU and UN to peace worldwide. However, a significant challenge for the UN has been the non-engagement in UNPKOs by European countries where only 7% of UN troops are provided by Europe and a significant proportion of them are represented within UNIFIL with 14 EU countries. Why do we have such low representation perhaps one explanation perhaps is that the public in any European country does not want their children to die for Juba, Bamako, or Goma. Something to reflect upon perhaps.

I would like to dwell briefly on some practical aspects relating to Soft Skills Practice in a mission area and some of the more important challenges that are encountered focusing on communication, cooperation, gender awareness and cultural awareness. UNIFIL 10,500 strong comprised 42 nations (70 nations if UN civilians included) including 14 mostly NATO EU nations. Any mission is a system which finds its level within the host population and between the parties and must be analyzed systemically. It is a melting pot of culture, religion, traditions, gender, humanitarian concerns, diplomacy politics and AGENDAS. It brings short deployment military up close and personal with long term UN career civilians in addition to local employees.

Mission acceptance by external actors and the local population is vital and UNIFIL being deployed in over 50 positions within a very conservative Shia area must be absolutely in tune with the traditions, religion and culture of the locals. This respect must be communicated daily by constant interaction with Mayors Mukhtars and Qaymaqams and the mission at every level. 500 females were utilized as much as possible to reach out to the female population impossible for UNIFIL males. I feel sure that you will appreciate the enormous responsibility that UNIFIL has for the protection of civilians.

*The mission must educate and evaluate to ensure it maximizes its potential with all the soft skills and must not forget that it is present at the invitation of the host country Lebanon. This is the GAP that you are helping to fill in advance of deployment and **on behalf of all deployed mission commanders I commend you for the work you are engaged in.***

We have highlighted this WEB of complexity within a mission however complexity is overcome by strong committed leadership. Leadership is the cement that brings it all together and makes it work and bottom up and top down Leadership at all levels are important. All of you aspiring CMs must be leaders in a mission. However, we have a lot to learn on this aspect and perhaps the most telling contribution from the Cruz Report is the way it highlighted a significant leadership issue

² Under the framework of the CSDP, the EU has launched some 35 missions and operations since 2003 bringing stability, rule of law, and security sector reform to countries as diverse as Afghanistan, the Democratic Republic of Congo, Kosovo, Iraq and Ukraine. About 7000 personnel are currently servicing in the 16 on-going operations, ten civilian and six military (Jan 2017)

³ Alexandra Novosseloff

⁴ Alexandra Novosseloff



A deficit of leadership is one of the main problems that prevents the United Nations from adapting. Leadership at all levels, from New York to the most remote field locations, needs to demonstrate initiative, commitment, and determination to adapt.....strong and committed leadership at all levels from the Secretary-General to line supervisors and commander.

On reflection UNIFIL benefited from a mature and sophisticated internal training system and this could make up for the shortfall in pre-deployment training by some nations. Operationally the mission was not at a high tempo and time was therefore available to ensure our soft skills were addressed comprehensively. Overcoming language difficulties is also a priority by conducting the training in the appropriate tongue within deployed units. Ensuring the mission is nested correctly is also assisted by local Lebanese UN employees. UNIFIL and EUTM Somalia always maintained a watching brief on any internal dysfunction such as SEA, racism, fraud or corruption which could have a serious reputational impact internationally and within the host country.

Irish Foreign Policy has supported PK since our first deployment in Lebanon in 1958. I believe that PK is the right way forward despite its detractors. However, Peace cannot be imposed or enforced it must grow from the parties. UNIFIL is proving that where we can secure the commitment of the parties, peacekeeping can be successful and deliver. The relative calm along the Blue Line between Israel and Lebanon tends to suggest that UNIFIL is merely a holding operation; and hence the question how much we should continue to invest towards this venture. However, I would posit that this holding operation has gained strategic significance in the current regional context. There is merit in holding the ground when everything around is in free fall.

APPENDIX 2 Guest Speech by Dirk Dubois

Dear General, dear madam Executive Director, dear professors, ladies and gentlemen,

Let me start by thanking our hosts from the GAP-consortium for the excellent conference they have organised. Congratulations for the excellent product you have come up with. It really fills a training requirement GAP, providing essential training on soft skill, much needed in so many of our peace operations. Thank you also for allowing me to address this distinguished audience for a few



moments and share with them some thoughts on peacekeepers during this reception in honour of them.

*I was born on Flanders Fields - you know, where the poppies grow - or so close by the battlefields as not to matter. Places like Ieper, Passendaele, Wytschote for me are not just dots on a map, but real towns and villages. So when the centennial of the Great War was commemorated in the past few years, I took a good look at many of the Memorial stones and monuments. Quite often, on British and Commonwealth monuments I found the following text from or rather paraphrasing John 15:13 "**Greater love hath no man than this; that a man lay down his life for his brothers.**" Now, I usually don't make a habit of quoting the good book. Even if I still vaguely think about myself as being Christian, I have to admit that I rarely see the inside of a church other than through the eyes of an art-loving tourist. In fact, I don't want to quote the words of our Lord as much as a religious text, but rather as a philosophical one. I thought that in a room full of military and political science academics, that would be safe, until I realised this afternoon, that we actually have a professor in philosophy attending the conference.*

If the good book considers that laying down your life for a friend is a great proof of love, then what does it mean to lay down your life for a complete stranger in a conflict in which by definition you are not a party? Yet this is exactly the sacrifice that has been brought by so many Peacekeepers, whether they were working under the flag of the UN, of the OSCE, the EU, AU, Now some of you may think that this is different, because these people were sent by their governments, that they were there as part of their jobs, that their sacrifice was not a personal choice. However, many of them have actually volunteered to be part of a peacekeeping force, many have experienced it as one of the high-lights in their military or civilian careers. And if even one such sacrifice could be avoided in future thanks to a better understanding of the required soft skills in an operation, then this whole project, research and development of the game, will have been worth ever eurocent and every second of time invested.

Speaking from a personal point of view, I have spent most of my life as a soldier. In the course of that almost 40-years long career, I have been awarded quite a few medals and honours. The one I have felt the proudest about when I received it, was the medal I earned serving as a UN blue helmet in the Baranja, now part of Croatia, but at that time still under Serbian control. I still remember that during the medal parade, they were playing E. Vangelis' "Conquest of Paradise" from the film 1492. The bombastic music is of course conducive to feeling good about yourself, but that was not the real reason for my sense of pride. I honestly believed and still believe today that we have done some good in that region and during the five years that we had a UN contingent deployed there, although with ups and downs, we have made a difference. But I have to admit, I was lucky: at least when I was there, we had a peace to keep and could really contribute to further stabilisation and reconciliation in the region.



Figure 6: Dirk Dubois giving his speech (photo Defence Forces Press Office)

Unfortunately, not all peacekeeping missions are so lucky: in many cases, there is little or no desire to have peace by the parties in the conflict, nor is there a will to really impose it by the international community. In these circumstances, although the operations operate under chapter 7 of the UN Charter, this is ill-suited and extremely difficult for the peace-keepers. Some of these missions have been ongoing for more than half a century, the oldest ones UNTSO in the Middle-East and UNMOGIP in Kashmir since respectively 1948 and 1949. Some of these missions have been subject to serious questions about their effectiveness and usefulness. My Dutch colleagues still cringe when you talk about Srebrenica and UNPROFOR. In my own country, Belgium, every year on the 07 April we commemorate the loss of 10 of our paratroopers in operation UNAMIR during the onslaught of the Rwandese genocide in 1994. We use this occasion by extension to honour all those who have served as peacekeepers in conflict areas around the globe and more specifically all those that made the ultimate sacrifice.

But despite that on a number of occasions things have gone wrong and although, as one of my friends working for the UN recently put it, " ...overall, the pace of the UN is overwhelmingly slow and mostly bureaucratic", in my opinion in many cases there is actually a will to learn and to improve. In many cases, the UN actually sets standards, for instance by its work on women, peace and security, on combatting conflict related sexual violence, on children in armed conflict, to name



but just a few of the important subjects. Similarly, the planned merging of DPKO with the Department for Political and Peacebuilding Affairs in a single Department for Peace Operations could significantly improve the efficiency of the organisation.

To be honest, I don't think that a structure, an organigram makes so much difference. What makes the difference are the people who work for the organisation. This is why we must continue to invest in sending capable people with the right mind-set to work for the International Organisations. This is why we must continue to train our people correctly and teach them how to react properly in certain situations in an international environment. This is why we need to learn to work with other cultures, respecting each other's differences without therefore betraying our own values.

*Whether it is as a UNMO, as a blue helmet, as a civilian working for the UN headquarters or in the field, as a member of an EU CSDP civilian or military mission or operation, as a member of an OSCE observation team, peacekeepers all over the world, many coming themselves from war-torn communities in recent past put themselves in harms way and even put their lives at stake every day for the benefit of peace. At least from a philosophical point of view, I dare to disagree with the John 15:13 and state: **""Greater love hath no person than this; that they lay down their life so that others can live in peace!"***

Thank you for your attention



APPENDIX 3 Guest speech given by Maria Mekri

Dear Ladies and Gentlemen, Peacekeepers, Friends and Colleagues,

My name is Maria Mekri; I am the Executive Director of SaferGlobe, a Finnish think tank on Peace and Security, and also a member of Gaming for Peace's End-User advisory board.

It is an honour to be here and likewise an honour to be speaking after Michael Beary and Dirk Dubois, although I realize that they have raised the bar quite high. First I would like to thank the organizers for their kind invitation, I have been very glad to be involved with GAP and to see the project develop and flourish.



Figure 7: Maria Mekri giving her speech (photo Defence Forces Press Office)

The inspiration for my speech comes from Federica Mogherini who in December made a speech at the annual conference of EU Consortium of Non-proliferation and Disarmament Think Tanks highlighting the three Cs of consistency, commitment and courage. These three Cs are what we need according to Mogherini to deal with the growing complexity of our world.



Instead of the three Cs, I am introducing the three Is but with reference to the words of Innovation, Inclusivity and Impact.

As Mogherini noted, our world is becoming increasingly complex and fragmented. Conflict-related civilian deaths doubled between 2010 and 2016, and from 2005 to 2016 the same time there was a five times increase in internally displaced people and a doubling of refugees; of which nearly half are children. Here in Europe, our societies are transforming, through internal divisions and changing demographics

Together with these significant changes, we are seeing a continued resurgence of emphasis on hard security and growing military capabilities. The cost of violence is rising and is currently in the teens of trillions of USD annually or over 10% of the gross global product.

Perhaps most worryingly, the hard security focus may be blinding us to other security elephants in the room and making us miss preventative mechanisms of conflict solving. In Finland, for example, nearly 20% of the youth are disenfranchised, the disenfranchisement together with an ageing population leading to serious concern about the sustainability of current societal structures of the future, and making these disenfranchised youth the most pressing security concern in Finland by far.

We need soft security, civilians, peacebuilders and soft skills too to create transformation, to prevent or at least curb the losses of life, hope, possibilities and natural resources.

INNOVATION, the first I, and continued development is needed so that we are not just solving the conflict of yesterday but also preparing for the complex, fragmented of tomorrow. The Gaming of Peace game focuses on the development of soft skills for conflict situations. The better able peacekeepers and crisis management personnel are to function well; the more likely they are to have a positive impact. The implicit message of learning and development is also vital. There is much room for technical innovation from conflict analysis tools, to evaluation and strategic planning, to negotiation and dialogue tools. Sometimes technology can create new opportunities, in mediation, for example; technology can be used to map issues and actors when parties are not yet willing to meet one another.

There is growing interest in innovation in peace and peace technologies. We are very excited in Finland to now host the UNTIL innovation lab, with a focus on peace and security. The Civilian Crisis Management Compact in the EU also creates potential for innovation. Some of the new technologies from blockchain to AI may also create new possibilities for understanding, and challenging inbuilt biases and limitations of perception if harnessed correctly. There is also much room for social innovation.

To be pertinent, however, innovation needs to be founded in both understanding (and research) and be cross-disciplinary and inclusive. Finding silver bullets is unlikely, but it is very possible to do harm when trying to do good. In Syria, for example, there was a mobile phone app that crowd-sourced safe havens, but which was then used to target civilians.

INCLUSIVITY is also necessary to ensure that we are creating impact for the people impacted by conflict most. The women and children, the youth, the disabled. Especially, the last is still very



much under-considered. Maiming strategies were used widely in for example Syria, resulting (together with lack of access to health care) in disability rates of up to 30% in some communities.

Inclusivity from the outside also means using a full-spectrum of capabilities and possibilities we have. I just want to give you one small example. I was in Liberia about a decade ago, working with the Liberian government and the UN through the transitional peace framework. In 2005, the then Chairman of the Transitional Government, Mr Charles Gyude-Bryant signed 103 treaties in what was perhaps the most of any country in a single day. After this day, the UN spent a significant amount of time and energy capacity building the Liberian government in understanding what exactly they had signed. In my junior position, I organized helped organize some of these trainings. Some Liberian civil servants were graduates from Harvard, but others could barely read. However, sensitivity to power dynamics and respect was high, so in the trainings you could not start from basics. UN brought several experts and we had a number of workshops. In one of them, as I was laying the table, an advisor for the Minister of Justice came to talk to me. He said “Maria, I do not understand these treaties. Why should we do this? Why should we tie Liberia like this? Is it not very bad for us?”. He could only ask me these questions because I was a young woman and he was not worried of losing his status. I explained to him that international treaties bind all signatories, so especially for small countries like Liberia, supporting international legal structures is vital. The very next day, we were listening to the UN radio in the car--- and the Minister of Justice is interviewed. He was asked the same question that I was asked, and he responded in pretty much exactly in my words-- meaning that the most junior person in the room had had perhaps the most impact.

IMPACT is the final I, and it will be more necessary for us to be able to show impact, i.e. benefit to the local population and to measure it. The Norwegian Foreign Council has just funded a large project called EPON or the Effectiveness of Peacekeeping Operations Network with the aim of studying impact. Many of us here are very well acquainted with the IECEU-project which studied the effectiveness of European Union crisis management operations and missions. These studies and projects, however, also need to lead to development and in creating better peacekeeping and crisis management.

As my final words, I would like you all to promote innovation in peace but with an eye on cross-disciplinary approaches; we really need to think together to think differently and better. That togetherness extends to inclusiveness both in terms of our planning and operations but also in how we work with the local population. To create impact, we need women and men, civilians and soldiers, able-bodied and disabled alike. And finally, we need to do our best to be our best in the conflict situations for the people who need it help most. Around me I see many people who have spent their careers doing just that, but I would like to remind you that the world is not finished and that much more work is needed. But for tonight let’s just raise a toast to Gaming for Peace and a successful year to us all, and then tomorrow, let’s get back to work.



APPENDIX 4 Conference Programme

GAP: The Soft Skills Summit

How to Train for Soft Skills Through Digital Games – A Case Study for Training Peacekeepers

Thursday 10 January

09:00 – 09:30 Registration **Davis Theatre, Arts Building**

09:30 – 09:45 Opening: **Anne Holohan**, Project PI and Coordinator

09:45 – 11:00 Filling the GAP: A Model Using Real World Experiences to Develop Scenarios and Learning Objectives for a Serious Game which has Inbuilt and Standardized Assessment – **Anne Holohan** (with **Vincent Wade**, **Mads Haahr**)

11:00 – 11:20 Coffee break

11:20 – 12:50 Break Out Parallel Sessions – **School of Ecumenics (G6, G7, G8)**

A Curriculum for the Role of Police in Peacekeeping
 Chair: **Maire Braniff** (U of Ulster)

Walentyna Trzcińska (WSPOL) *Police officers on peacekeeping missions – their tasks and preparation*

Markus Feilke (German Federal Police) *The importance of training on soft skills for police officers deployed to international*

Game-Based Soft Skills Learning in Different Sectors
 Chair: **Mads Haahr**

Janet Benson (Learnovate, TCD) – *Game-Based Learning into Today's Workplaces: Who's Winning?*

Ciara Kennedy (AnimaVenture) – *AnimaVenture – Unlocking the Imagination, Creativity, Empathy & Innovation –*

Culture as a Resource
 Chair: **Justyna Pyz**

Kamila Trochowska, **Ryszard Szpyra** (WSU) – *Cross-cultural competence in GAP*

Livingstone Thompson (SIETAR) – *Steps Towards Building Effective Intercultural Relations*

Yvonne Masakowski (US Naval College) –



<p><i>peace operations</i></p> <p>Peter McCutcheon (PSNI) <i>'Policin g Lessons from Kosovo'</i></p>	<p><i>Gaming for Environmental & Inner Peace.</i></p>	<p><i>Developing Global Leaders with Cross-Cultural Competency</i></p>
<p>12:50 – 14:00 Lunch break</p>		
<p>14:00 – 14:45 Keynote: Tom Digby, Springfield College, author of <i>Love & War: How Militarism Shapes Sexuality and Romance</i> (Davis Theatre, Arts Building)</p>		
<p>15:00 – 16:30 Break Out Parallel Sessions – School of Ecumenics (G6, G7, G8)</p>		
<p>Training Needs in Contemporary Peacekeeping Missions Chair: Kieran Doyle</p> <p>Timothy O'Brien, (Defence Forces, UN Training School) – <i>Defence Forces PSO Pre Deployment Training.</i></p> <p>Jonas Alberoth (Folke Bernadotte Academy) – <i>Focusing on critical needs – soft skills for hard results</i></p>	<p>Assessment tools to improve organisational effectiveness Chair: Anne Holohan (TCD)</p> <p>Mascia Touissant (Enquirya) - <i>Tracking progress in soft skill training</i></p> <p>Stephen Rice (Upskill) – <i>Accreditation into action: Keeping it real in the 4th revolution</i></p> <p>Vinny Wade (TCD/ADAPT) – <i>Rating assessment in serious games</i></p>	<p>Gender: Challenges & Benefits Chair: Yvonne Masakowski (US Naval College)</p> <p>Gillian Wylie (TCD)- <i>Gendering peace</i></p> <p>Tom Digby (Springfield College) – <i>Gender as a Hindrance to Peace</i></p> <p>Charlotta Ahlmark - (ESDC) Contributing to mainstreaming gender in CSDP training</p>
<p>16:30 – 17:30 Opportunity to sample playing game/Games Bazaar</p> <p>Davis Theatre, Arts Building</p>		



19:30 – 21:30 Reception for Peacekeepers. Guest speakers: **Michael Beary, Dirk Dubois, Maria Mekri (Dining Hall, TCD)**

Friday 11th January

09.00 – 10.40 Screening of movie: *A Journey of a Thousand Miles: Peacekeepers* (2015)

10:40 –11:00 Coffee break

11:00 –12:30 Break Out Parallel Sessions **School of Ecumenics (G6, G7, G8)**

Curriculum for Training Civilians on Complex Missions

Chair: **Petteri Taitto**

Josef Reiterer (UN OCHA) *Influence and Authority in Adult Learning*

Silva Lauffer (ENTRI project) – *Posing or Posture? Soft Skills for Hard Mandates*

Vera Pavinska (CEPOL) – *EU Strategic Training Needs Assessment EU-STNA 2019-2021*

Exploring Alternatives in Learning Through Gaming – design and skills

Chair: **Anne Holohan**

Małgorzata Gawlik-Kobylińska (WSU) – *Four Dimensions of Learning in the Gamified “Introduction to Cultural Awareness” eCourse*

Gene Carolan (DIT) – *Unlocking The ‘Good’ Ending: What Video Games Teach Us About Sustainable Peace*

Michael Cooke (MU) – *The Skills of Peace Building – From Dialogue to Design*

12:30 – 12:45 Closing Remarks **Anne Holohan**



APPENDIX 5 Press Release

News Release

New Digital Role-Playing Game launched to train international military, police and civilians for peacekeeping missions

Military, Police & Academia join forces to develop ‘Gaming for Peace’ – A European Research project led by Trinity College Dublin

Dublin, January 10th, 2019 – A new digital 2D role-playing game which will be used for training military, police and civilian peacekeepers in conflict zones was launched today [January 10th] at a Soft Skills Summit at Trinity College Dublin. ‘Gaming for Peace’ is a new training tool with an inbuilt curriculum in soft skills for peacekeepers as well as an assessment of those skills.

It is planned that all military, police and civilian personnel deployed in EU conflict prevention and peacebuilding missions such as Iraq, Libya, Afghanistan and Palestine will be able to receive training through the online role-playing game.

‘Gaming for Peace’ (GAP) is a European Commission Horizon 2020 funded project being conducted by a team of researchers from Sociology and the ADAPT Centre at Trinity College Dublin, and is led and designed by **Associate Professor Anne Holohan** of the School of Social Sciences and Philosophy. It brings together 15 European partners, including police and military forces such as the PSNI, Irish Defence forces, the Finnish, Bulgarian and Polish militaries, as well as the Polish and Portuguese police forces. Other universities involved are NUI Maynooth, Ulster University, University of Laurea in Finland as well as companies such as Upskill in Belfast, and the Irish computer games company Haunted Planet.

Soft skills relevant for peacekeeping were identified through the examination of existing training practices, and through in-depth interviews with 180 experienced military, police and civilian personnel from the project’s partners. These also served to generate authentic scenarios, issues and events related to the soft skills embedded in the 2D digital role-playing game. Players role-play as a member of another organisation, a different gender, ethnicity or nationality. The player is assessed before, during and after the game. They can see through the progress they are making, their improvement in communication, gender awareness and cultural awareness from playing the game. The game is playable in segments to allow for group discussion of the issues it addresses. On completion of training, players can receive an individual ‘Soft Skills Passport’ which is benchmarked to international standards.



Commenting on the significance of 'Gaming for Peace', **Minister for Higher Education, Mary Mitchell O'Connor** said:

"This is a wonderful example of European collaboration in its academic interdisciplinarity and cross sectoral expertise which has delivered this worthwhile accessible project of immense societal value. I am delighted to be joined by academia, military and police forces here today at Trinity in launching 'Gaming for Peace' which will better equip peacekeeping personnel the world over in the challenges they face."

Ahead of the Soft Skills Summit this week, the European Security and Defence College, which oversees the training of all EU personnel deployed on peacekeeping UN and NATO missions, piloted the delivery of the game.

Trinity became a member of the European Security and Defence College, nominated by the Department of Defence, to enable delivery of GAP to all EU personnel training for peacekeeping missions.

GAP Project Principal Investigator and Coordinator, **Associate Professor Anne Holohan** of the School of Social Sciences and Philosophy said:

"Current training for personnel involved in conflict prevention and peacebuilding missions does not prioritise the critical softer skills of communication, gender and cultural awareness. Most missions require a variety of organisations to coordinate and cooperate together, including militaries and police from different countries in Europe, and missions are mixed in terms of gender and culture. Success in preventing conflict is to a considerable extent dependent on their ability to communicate and work together well in the mission, and to see diversity as a valuable resource in these contexts."

"Training a large number of personnel in something like soft skills where practice is required before deployment on a mission is expensive and logistically difficult. 'Gaming for Peace' is a training tool that is accessible to all personnel at minimal cost. The only thing that is required is an internet connection and it can be downloaded and delivered locally in a classroom context where, crucially, sensitive issues can be raised and discussed through the experience of playing the game."

Irish Defence Forces' Lieutenant Colonel Seán Murphy added: *"Gaming for Peace provides a worthwhile additional opportunity for personnel involved in future deployments to conflict prevention and peacebuilding missions to enhance their soft skills using an accessible technological solution."*

A key note address will be given by Major General Michael Beary, recently retired Head of Mission and Force Commander of UNIFIL at the Soft Skills Summit Reception to honour peacekeeping personnel on Thursday 10th at 7.30pm in the evening in the Dining Hall at TCD. That event is free and open to all peacekeeping personnel.



For more information on the Soft Skills Summit [click here.](#)

https://gap-project.eu/conferences/gap_gaming-for-peace_conference/conference-programme/

Ends

For media queries contact Head of Media Relations, Caoimhe Ní Lochlainn, communications@tcd.ie tel: 087-9958014

Notes to Editor:

The partners in the Consortium are the Irish Defence Forces, the PSNI, the Finnish military, the Polish police, the Polish War Studies University, the Portuguese Police, the Bulgarian military, NUI Maynooth, Ulster University, University of Laurea in Finland, and SMEs' Haunted Planet Games Studios, Enquiryra, and Upskill.

Evaluations of the game have demonstrated through the scores that GAP does make a measurable and positive contribution to increasing competence in the soft skills specified in the curriculum. Based on feedback from the evaluations, the game is now playable in 9 segments so it can be delivered in a 'blended learning' format: individual game-play and assessment feedback combined with group/classroom discussion after each segment.



ANNEX Task 7.7 Exploitation Strategy



Project Start Date: 1.9.2016

Project Duration: 30 months

Exploitation Strategy

Deliverable details	
Deliverable number	
Author(s)	FAC: Sheryl Lynch; Stephen M. Purcell and William Hynes
Due date	28/02/2019
Delivered date	
Reviewed by	HPS, Laurea, Enquirya, TCD
Dissemination level	PU or CO
Contact person EC	Carla Rocha-Gomes

History of Changes			
Date	Version	Person(s) in Charge	Description
28/02/2019	v0.1	Sheryl Lynch, Stephen M. Purcell and William Hynes	Description of changes made
XX/XX/2019	v0.2		
XX/XX/2019	v0.3		



GAP Consortium (15)

End Users

Military

Akademia Sztuki Wojennej (War Studies University)

National Defence University (Fincent)

Irish Defence Forces (DF)

Bulgarian Defence Institute

Police

Wysza Szkoła Policji Szczytnie (National Police Academy of Szczytno)

Police Service of Northern Ireland (PSNI)

Portuguese State Police (PSP)

Academic

Trinity College Dublin (Coordinator)

University of Ulster

National University of Ireland Maynooth

Laurea University of Applied Sciences

SMEs

Future Analytics Consulting Ltd.

Haunted Planet Studios Ltd.

Upskill Enterprise Ltd.

Enquirya BV

“GAP will achieve its objectives by bringing together a variety of actors to review and evaluate current training, to identify the gap for accessible, affordable relevant for CPPB missions soft skills training, to create a soft skills game-based curriculum which can be delivered via a multiple player online role playing game, and to build into the game the means to measure learning outcomes. To do this, coordination is required from a variety of academic disciplines, experts in skill evaluation, game design and end users. This is achieved through the composition of the project consortium and advisory boards.”

(Grant Agreement, 2016)



Contents

1. Introduction	1
1.1 What is the GAP Exploitation Strategy?.....	2
1.2 GAP Aims and Solutions.....	4
2. Exploitable Foreground.....	5
2.1 GAP Exploitable Foreground	6
2.2 GAP Potential Consumers and Customer Groups	10
2.3 Business Model Canvas	13
2.4 Joint and Individual Exploitation Activities	15
3. Fields of Exploitation	16
3.1 Technology readiness levels (TRL)	16
3.6 From an IT, Software and Game Developer Perspective	21
3.6 From an Academic/Research/SME Perspective.....	27
3.7 From a Peacekeeping/Defence Professionals Perspective	33
4. GAP - Seven Opportunities for Exploitation	35
5. Exploitation Plans of Key Groups in Consortium	42
5.1 Peacekeeping Professionals	42
5.2 Academics/Research/SMEs	46
5.3 IT, Software and Game Development	51
6. IPR and Commercialisation	54
Commercial and IPR considerations.....	55
7. Conclusion	66
Commercialisation Funds	66
Next steps.....	67
References.....	68



1. Introduction

This Exploitation Strategy recognises the social entrepreneurship of the GAP project and aims to delineate the various ways that the project results can be commercialised and innovatively utilised for the betterment of European society. The priorities in this regard are making the GAP game and assessment component readily available for key end users by the end of the project. The GAP project proposes that Serious Games offer a 21st century environment within which Conflict Prevention and Peace Building (CPPB) personnel can experience scenarios through role-playing in their own organization and by role-playing people from other organisations, and in doing so, increase their understanding, creativity and ability to communicate and collaborate with the other organizations in the network organization that is a CPPB mission. The potential to utilise the soft skills training developed by GAP for a wider range of end users has crystallised throughout the latter part of the project in tandem with an increased global awareness of the need for gender sensitivity and cross-cultural awareness training in the workplace.

The business case for serious games is undeniably robust. Games for learning have created dynamic and profitable business opportunities within the education sector, with simulation training projected as one of the most lucrative segments. The global [serious games market](https://www.alliedmarketresearch.com/serious-games-market) was valued at \$2,731 million in 2016, and is expected to reach \$9,167 million by 2023, growing at a CAGR of 19.2% from 2017 to 2023.⁵ Moreover, **Ireland's e-learning Industry:** In 2015, the e-learning Industry in Ireland employed 2,500 people across 150 companies and generated revenues of €230 million.⁶ This included content and platform developers and providers of both.

⁵ <https://www.alliedmarketresearch.com/serious-games-market> accessed January 2019.

⁶ O'Brien, C. (2015). Ireland set to exploit expansion in education technology. *The Irish Times*. [online] Available at: <https://www.irishtimes.com/business/ireland-poised-to-exploit-expansion-in-education-technology-1.2261309> [Accessed, January 2019].



The structure of the market is well understood with vertical division into aerospace and defence, automotive, corporate, education, energy, advertising, and others (research, tourism, and agriculture, government, healthcare, retail, and application division into e-media and emergency services, human resources, marketing, product development, sales, training, and support.

The knowledge and technology generated by the GAP project are expected to be marketable to enterprise customers (rather than end users) vertically in one or more of defence, education and government and application-wise in human resources and training; for micro-businesses upwards.

The GAP project is concerned primarily with producing a game concept and proving its efficacy. The immediate output from the research project will be disseminated as a series of game scenarios running in a single game engine. While authoring tools are becoming increasingly popular in the games industry, producing a full authoring tool is beyond the scope of the project. The games produced can be adapted by the project partners (and potentially third parties) for other learning purposes on a per-scenario basis.

In addition, follow-up efforts (i.e., after the completion of the project) can focus on bringing the games to a wider market for example, through the use of authoring tools. Also, there may be opportunities for support services to contextualise GAP to specific buyers' needs whilst maintaining the achievement of the core 'soft skills' and assessment principles. This was reiterated at the GAP Final Conference whereby FAC spoke with stakeholders across the defence, academic and training sectors who expressed a desire for a bespoke GAP offering to meet their specific needs. Commercial dissemination can take place in several (not necessarily mutually exclusive) ways.

1.1 What is the GAP Exploitation Strategy?

The exploitation strategy is a document containing the definition of target groups, user requirements, the activities each partner in the consortium is committed to carry out, the



means to be adopted and the expected results of the strategy containing realistic business models.

Task 7.7 is divided into two phases and will cover the following: 1) Exploitation Plan (focusing on educational and commercial exploitation after the project) 2) Intellectual Property Rights (IPR) issues and Customer Service. The consortium has been working on this for the past year and dedicated a month at the end of the project, after the Final Conference, to following up the commercialization and educational exploitation leads from the conference. These results complement D7.4, the Final Conference Report and Press Release.

The objective of this report is to **analyse the potential and opportunities for the commercial exploitation of the GAP foreground methods and tools on completion of the project** and **to maximise the impact of GAP on a societal, commercial and educational level across key stakeholder groupings.**

To achieve this, we have employed the GAP Business Model Canvas (BMC), a strategic management template which is helping us to develop a new business model and exploitation strategy for GAP. This visual chart comprises several categories (including Value Proposition, Customer Base, Key Activities and Key Resources) which help to identify the benefits of the product (the GAP platform and skills accreditation) so that it can be positioned within each partner's specific client and contact base. The BMC has allowed us to frame and to better understand the value of the GAP results for principal stakeholders and end-user groups and has also allowed the GAP system to explore the relationships with and between its principal customer segments.

In general, there are clear differences between European countries in preparing for, and the management at the time of preparing peacekeeping activities, and the willingness to learn from these. However, differences are mainly due to the characteristics of the countries concerned (risk level, population, gender norms, attitudes towards diversity, and establishment of administrative system etc.). The differences in approaches seem to be slowly converging. In all countries, there is a trend towards upskilling defence, police and



peacekeeping personnel on soft skills, **namely gender equality and cross-cultural awareness.**

1.2 GAP Aims and Solutions

The initial focus in developing Gaming for Peace (GAP) was to serve the learning of soft skills in the peacebuilding community. In particular, GAP has focused on the skills of intercultural competence and inclusion, and gender awareness. These issues are gaining increasing traction⁷ and the top priority of the European Institute for Gender Equality (EIGE) lists awareness raising and training as its top priority.⁸ GAP seeks to provide a digital solution to this challenge, permitting training to happen where it otherwise would not be possible. The project's methodology aims to create a cooperative working environment where the community affected by the conflict is respected and the peacekeepers have the skills necessary to interact with tact and gender sensitivity, and cultural awareness. Primary aims are:

1. To coordinate between various organisations, including peace building stakeholders, policy makers and other international research projects past and current, to conduct a rigorous assessment of current knowledge and existing training related to conflict prevention and peace building in order to capture current best practice. Through broad consultation and review of relevant documentation we will identify current gaps in training for the soft skills needed to perform successfully in multicultural EU missions which manifest diverse understanding of operations, gender and culture;
2. In response to identified training needs, to develop an innovative base curriculum and tool for delivery and further development of that base curriculum through the design and play of a multiple player online role-playing game. The game will thus be both an innovative tool for delivering training and crucially, a new model in curriculum development as the base curriculum, informed by the state of the art in soft skills relevant for CPPB missions and delivered through a Serious Game, will be

⁷ The 2018 Nobel Peace Prize was awarded to Denis Mukwege and Nadia Murad for efforts to combat “sexual violence as a weapon of war” (NobelPrize.org, 2018).

⁸ <https://eige.europa.eu/gender-mainstreaming/methods-tools/gender-awareness-raising> , accessed January 2019.



continuously developed and refined as players play the game both in the development process in the GAP project and after, in real world training.

The structure of the market is well understood with vertical division into aerospace and defense, automotive, corporate, education, energy, government, healthcare, retail, media and advertising, and others (research, tourism, and agriculture); and application division into emergency services, human resources, marketing, product development, sales, training, and support. The knowledge and technology generated by the GAP project are expected to be marketable to enterprise customers (rather than end users) vertically in one or more of defense, education and government and application-wise in human resources and training; for micro-businesses upwards.

2. Exploitable Foreground

Foreground means the results, including information, materials and knowledge, generated in a given project, whether or not they can be protected. It includes intellectual property rights (such as rights resulting from copyright protection, related rights, design rights, patent rights), similar forms of protections (e.g. sui generis right for databases) and unprotected knowhow (e.g. confidential material).

Thus, foreground includes the tangible and intangible intellectual property results of GAP. Results generated outside a project (i.e. before, after or in parallel with a project) do not constitute foreground. Results generated in parallel with a project are often informally referred to as "sideground".

The GAP project has built upon feedback and challenge of key stakeholders to deliver various end products, or 'exploitable foreground'. The exploitable foreground for GAP will incorporate more than just the technology platform, and Skills Passport. In addition, the organisational processes, trainings and insights are valuable outputs with exploitation potential for each of the project partners.



2.1 GAP Exploitable Foreground

The GAP website as an e-learning platform, the project's methodologies and tools, the Handbook, and the GAP Game, training and assessments methods are all included in the GAP Exploitable Foreground.

Table 1: GAP Exploitable Foreground

GAP Exploitable Foreground/GAP Outputs	
Output	Recommendation
Game Beta	Haunted Planet Studios have already acted on this point. GAP may wish to use this demo version of the game as a marketing strategy to potential investors, for play-through at conferences, or to briefly show to GAP's potential customers while networking.
General Release of Game	Haunted Planet Studios are considering whether it be possible to launch a general release of the GAP game, i.e., a version for the general public. This would likely exclude the specific training components and involve minor modifications to the story and characters to emphasise imaginative immersion further.
GAP Handbook	This resource could be used in teaching and learning institutes. Print and downloadable versions will be distributed to specific stakeholders. TCD releases the handbook by the end of March and LAU posts it to the website
E-Learning Offering	Industry is only expected to expand further as



	most organisations and their staff move mind sets to an approach of life-long learning and targeted development. As the industry has developed, several big tech companies have moved in. In 2015, Lynda.com was purchased by LinkedIn for \$1.5 bn, having received venture capital funding only two years previously (McCue, 2018). It is recommended that GAP offer an e-learning component for the next 12 months with a view to developing a CPD offering.
--	---

The GAP Game Testing was organized in seven different locations. Between August and end of October 2018, members of the GAP team facilitated the testing events in Ireland, Portugal, Bulgaria, Poland, Finland and Northern Ireland for different stakeholders and end users of GAP soft skills game. The overall purpose of the evaluation testing was to evaluate the emerging and developing platform technically and in terms of the assessment in the game and the pre and post play assessment.

The simulation showcased the potential of a GAP platform as an efficient tool to deliver soft skills training to pre-deployment personnel. Feedback was circulated publicly via the GAP Newsletter, published in December 2018.⁹ For example, a veteran of two peace keeping missions Jaakko Hiltunen studies social sciences at the University of Tampere, and has always enjoyed playing video games. Jaakko was pleasantly surprised how well the game fit the operative atmosphere that he had experienced in Lebanon. It was easy to identify with the situation, and it even humorously depicted some of the cultural issues when collaborating with different the nationalities on missions. “The game describes that there are different kinds of people”. Jaakko notes that the GAP game teaches a peacekeeping

⁹ GAP Newsletter, December 2018. <https://gap-project.eu/wp-content/uploads/2018/12/GAP-Newsletter-Dec-2018.pdf>, accessed January 2019.



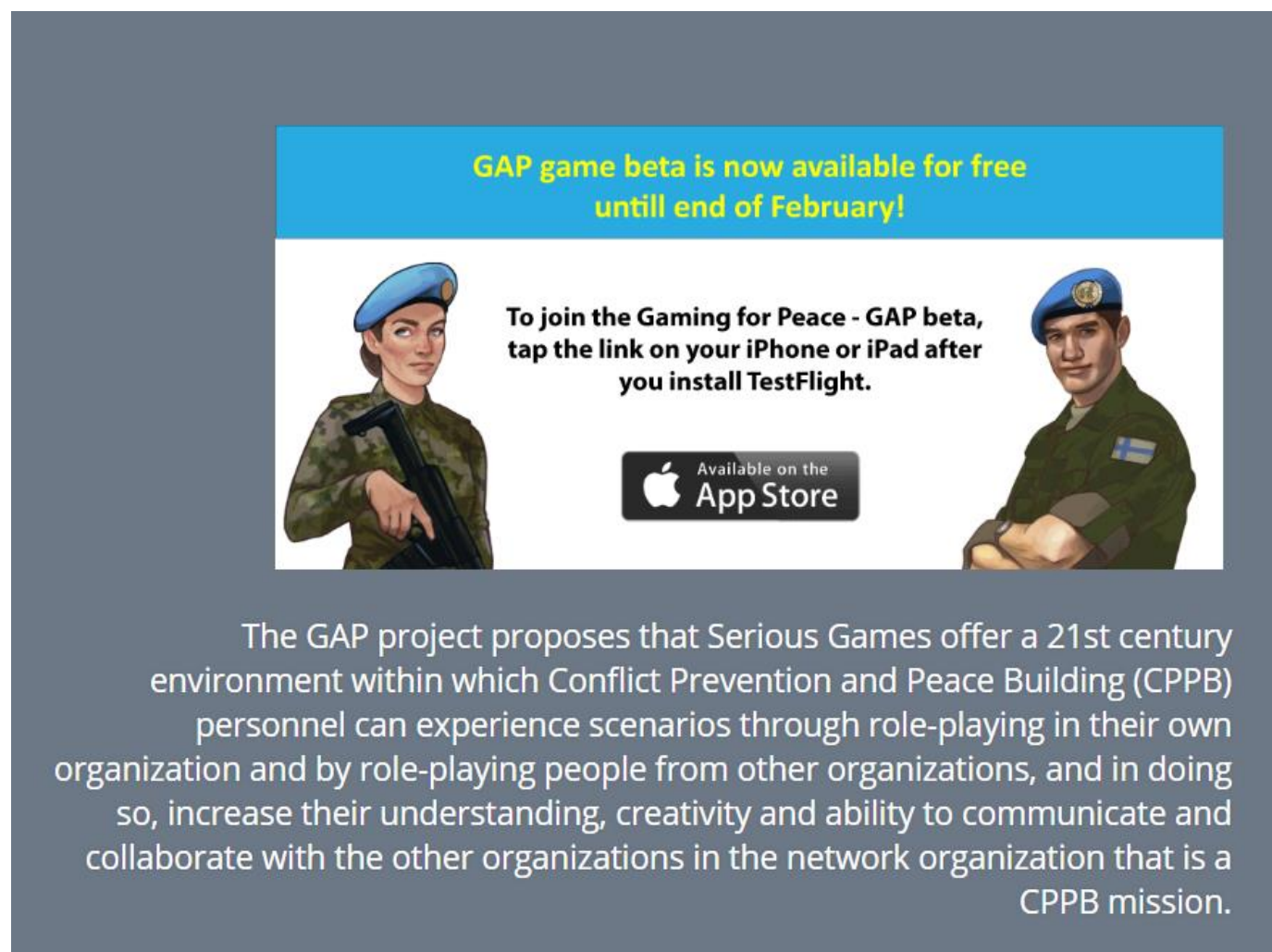
attitude, it teaches how one should be. Jaakko felt that some of the ways which gender issues were presented in the game were from a somewhat shallow perspective, but then in some parts they were brought up in very novel ways. Jaakko recommends using the game during predeployment training, because, at least his training included relatively little information on the local culture; “It was interesting to have the opportunity to participate and influence the way in, which the game will develop”. Peacekeeping missions should focus more social skills, says Jaakko, and noted that the work of a soldier is different from the work of a peacekeeper, and that the game can help bridge these two roles together. “It is great that this type of projects get funded”. In addition to the user feedback, the usability has been justified and exemplified by the GAP research, continuous reporting and final project results. The testing period and the subsequent training workshop in TCD with the ESDC on January 8th, 2018 successfully displayed the capabilities of the software and the methods of GAP.

The final evaluation tested the LEA and Defence groups from Ireland, Portugal, Bulgaria, Poland, Finland and Northern Ireland. The roles of people and organisations differ between countries in the peacekeeping preparation and operational level, therefore it is vital that the methods and the platform are adaptable to each country or region as what is applicable in Poland may not be feasible in Ireland. This is vital going forward as the option of expanding the GAP suite of soft skill trainings broadens and incorporates other sectors and focusses on other aspects of equality and cultural awareness.

As stated in the **GAP Exploitable Foreground/GAP Outputs table above**, Haunted Planet Studios are considering further developing the concept of the GAP Game, including developing it as a standalone game for general release beyond the specific training remit of the GAP project. This broadens the exploitable potential of the game and will open the market for it to a wider audience. HPS have also facilitated the availability of GAP game as a trial, currently available on the website here: <https://gap-project.eu/>



Figure 1: Screen shot of downloadable link to GAP Game Trial via <https://gap-project.eu/>



GAP is a Simulated Deployment Scenario game – the online role-player game simulates a peace keeping scenario and illustrates the functions of the platform to participating actors. Players are assessed and receive feedback on a number of soft skills tests i.e. communication and gender awareness.

Added Value

The eLearning aspect of GAP will provide organisations and users, with an easily accessible tool which offers learning support whilst, helping them to better understand soft skills in the



Peacekeeping community, furthermore it will help them to identify their role within the conflict resolution/mitigation process.

The Training Manual was created with the aim to complement the other tools generated as part of the project, taking the user through a journey by using the game to create understanding and knowledge, the assessment aspect to measure their current soft skills level and the handbook/expanded curriculum to embed the learning outcomes.

In addition to this, the tools act as a unique resource for training staff, guaranteeing all users have access to the same level of training and development that as far as we are aware is not present in any other soft skill training tools, not only benefitting the organisation, but also the user themselves.

2.2 GAP Potential Consumers and Customer Groups

The potential customers or consumers of the GAP products are training networks and institutions (i.e. there is an interest from the European Security and Defence College,) the police, military, government, both national and regional, existing peacekeeping groups such as NATO, and voluntary groups. In addition, the training offering provided by EIGE could also be targeted by GAP as an annex/embellishment of their exiting Gender Training Tool and complementary suite of modules.¹⁰

GAP's certification is very much *au courant* with *The World Economic Forum* report, *Strategies for the New Economy Skills as the Currency of the Labour Market*, specifically, **Strategy 6. Design coherent and portable certifications**. This strategy is about, 'Qualifications—and particularly, certificates—are a central marker for job-fit, yet the skills acquired, and the comparability of **qualifications remain unclear due to a lack of broad standards and principles of portability** across different granting institutions, bodies and

¹⁰ EIGE Gender Equality Training, <https://eige.europa.eu/gender-mainstreaming/toolkits/gender-equality-training>, accessed January 2019.



economies. Without common standards, individuals are unable to signal competencies that they currently possess, and **employers are unable to validate job applicants' claims without further primary assessment**. Under such circumstances, the brand value of any formal qualification and previous work experience become **proxies for the skills** held by individuals. Such proxies will continue to dominate judgement of role suitability and mobility within and between labour markets without coherent approaches to certification. The resulting friction points create additional inefficiencies when matching supply to demand in the labour market, making it difficult for workers to signal the skills they currently **possess at all times—particularly in periods of career transition or when moving to new geographic locals**. A closer focus **on inter-operable skill certification** alongside more broadly aligned standards for proficiency and assessment has the potential to empower individuals by enhancing their awareness of the extent and value of their skillset. This requires a broader shift away from the traditional delineation between government-funded education and employer-funded education to a model of greater collaboration between government and business **on agile training systems** that strike a better balance between public and private responsibility for financing and provide ongoing learning and certifications to workers¹¹.

As with the project aims of GAP, the WEF strategy goes to discuss the need for, 'closer collaboration and stronger agreement on **cross-applicable certification**—and on the measures of proficiency across educational institutions—can be incentivized through: **clearly defined skills that are taught in each course mapped to a shared skills taxonomy, efforts at recognizing prior learning¹² and new methods of logging qualifications such as a distributed ledger (blockchain)**. Some experiments in aligning education frameworks are already underway, such as the European Qualifications Framework, which aims to connect the qualifications recognized between European Union countries. In addition, MIT's Digital Certificates Project has experimented with approaches to provide **skills certification**

¹¹ International Labour Office (ILO), 2018. ILO, 2018.

¹² ILO, 2018.



through **badging**, leveraging the capabilities of blockchain technology¹³.’ The blockchain approach is interesting and should be explored in any further iterations and evolving cycles of the GAP programme in the future.

Table 2: GAP’s Key End Users and Stakeholders

GAP’s Key End Users and Stakeholders	
International organisations	EEAS, EDA, European Commission
Training networks	Training providers, military academy, social science departments/universities,
Academia	academic partners specialising in Political Science, Information Technology, Education, Law, International Relations, Public Administration, Social Sciences, Economics and related fields
MSs Training institutions	ESDC, CEPOL, EIGE, EPSO PTEC (NATO), EUPST (involved with soft skills (such as mediation and negotiation))
NGOs	involved with soft skills (such as mediation and negotiation Concern; GOAL; Human Rights Watch; UNHCR; Humanitarian Organization for Poverty Eradication; Red Cross
SMEs	Private security companies operating internationally in conflict zones and SME games companies
Other projects	IECEU; WOSCAP; EU-CIVCAP; ProsocialLearn; TACTIC_EU etc.

There has also been a pivot to support police services through GAP. PSNI are already part of the consortium but in the last few months of GAP, a concerted effort to foster the police services as a target group commenced. The German Police Academy are very interested in using GAP for training right away. Moreover, the Polish Police Headquarters International Operations Divisions, not only took active part in shaping the game, but are eager to integrate the GAP training curriculum in their annual international training (WSPol will elaborate on that sector).

¹³ Digital Certificates Project, <http://certificates.media.mit.edu/> (accessed 040119)



2.3 Business Model Canvas

The Business Model Canvas (BMC) is a strategic management and lean start-up template for developing new or documenting existing business models. The basic structure of the BMC is set out below:

Figure 2: Business Model Canvas Template via <https://canvanizer.com>

The Business Model Canvas

Designed for: _____ Designed by: _____ On: _____
Iteration: _____

Key Partners Who are our Key Partners? Who are we buying from? Which Key Resources are we acquiring from partners? Which Key Activities do partners perform? Which Key Channels do partners use? Which Key Relationships do partners have?	Key Activities What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams? Which Key Resources do we need? Which Key Channels do we need? Which Key Relationships do we need?	Value Propositions What value do we deliver to the customer? Which one of our customer segments are we looking to solve? What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying?	Customer Relationships What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? How are they engaged with the rest of our business model? How costly are they?	Customer Segments For whom are we creating value? Who are our most important customers? Which ones are we targeting? Which ones are we not targeting?
Key Resources What Key Resources do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams? Which Key Activities do we need? Which Key Channels do we need? Which Key Relationships do we need?	Channels Through which Channels do our Customer Segments expect to be reached? What is the reach? How are we reaching them now? How are we planning to reach them in the future? Which ones are most cost-efficient? How are we integrating them with customer relations?	Cost Structure What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive? Which Key Channels are most expensive?	Revenue Streams For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? How much does each channel/channel segment contribute to overall revenue?	

www.businessmodelgeneration.com

Figure 2 comprises several categories (including Value Proposition, Customer Base, Key Activities and Key Resources) which help to identify the benefits of the product (the GAP platform and Skills Passport) so that it can be positioned within each partner's specific client and contact base. This process of brainstorming and refining will organically lead to a better understanding of the exploitation strategy for each segment of the market. A well-defined Exploitation Plan and Intellectual Property Rights (IPR) issues and Customer Service Plan will



ensure profound commercial exploitation of the GAP project outputs. Each model includes the following content, explained by the following key.

Key:

Infrastructure

Key Activities: The most important activities in executing a company's value proposition.

Key Resources: The resources that are necessary to create value for the customer. They are considered an asset to a company, which are needed to sustain and support the business. These resources could be human, financial, physical and intellectual.

Key Partners: In order to optimise operations and reduce risks of a business model, organisations usually cultivate buyer-supplier relationships, so they can focus on their core activity. Complementary business alliances also can be considered through joint ventures, strategic alliances between competitors or non-competitors.

Offering

Value Propositions: The collection of products and services a business offers to meet the needs of its customers. According to Osterwalder, (2004), a company's value proposition is what distinguishes itself from its competitors.

Customers

Customer Relationships: To ensure the survival and success of any businesses, it is essential to identify the type of relationship they want to create with their customer segments.

Customer Segments: This section seeks to identify which customers it tries to serve. Various sets of customers can be segmented based on the different needs and attributes to ensure appropriate implementation of corporate strategy meets the characteristics of a selected group of clients.



Channels: A company can deliver its value proposition to its targeted customers through different channels. Effective channels will distribute a company's value proposition in ways that are fast, efficient and cost-effective. Channel phases are shown as:

1. **Awareness** – How do we raise awareness about our company's products and services?
2. **Evaluation** – How do we help customers evaluate our Value Proposition?
3. **Purchase** – How do we allow customers to purchase our products and services?
4. **Delivery** – How do we deliver a Value Proposition to customers?
5. **After-sales** – How do we provide post-purchase customer support?

Finances

Cost Structure: This describes the most important monetary consequences while operating under different business models.

Revenue Streams: The way a company makes income from each customer segment.

The Business Model Canvas of each of the consortium members is used to focus their exploitation strategies for GAP on completion of the project:

- Overall Value Proposition of GAP
- The Ability to Provide Soft Skills Training to a wide range of end-users
- Assessment and Feedback Function
- Communication and Dissemination
- Mission Preparation and Conflict Resolution

2.4 Joint and Individual Exploitation Activities

The three categories of consortium members (Software and Game Development Perspective, an Academic/Research/SME Perspective and from a Peacekeeping/Defence Professionals Perspective) may collaborate jointly to share contacts and expertise in the



pursuit of exploitation opportunities such as a GAP Consulting Company. within their domain. Each of the GAP consortium members will be responsible for developing an individual exploitation plan, with their own expertise, client base and contacts in mind.

Intellectual Property Rights (IPR) *issues in Relation to Exploitation*

To maximise the exploitation of all foreground results, GAP partners may agree to set up a **Designated Activity Company** which could ultimately result in a written bilateral agreement as mentioned in the Consortium Agreement's section 9.5.

3. Fields of Exploitation

3.1 Technology readiness levels (TRL)

In order to explore the Fields of Exploitation, the Technology Readiness Levels (TRL) must be unpacked. TRLs are widely understood in terms of product development and the following definitions are taken from the Horizon 2020 documentation.¹⁴ Where TRL levels are mentioned the following definitions apply, unless otherwise specified:

TRL 1 – basic principles observed

TRL 2 – technology concept formulated

TRL 3 – experimental proof of concept

TRL 4 – technology validated in the lab

TRL 5 – technology validated in a relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 6 – technology demonstrated in a relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 7 – system prototype demonstration in an operational environment

TRL 8 – system complete and qualified

¹⁴ <https://enspire.science/trl-scale-horizon-2020-erc-explained/> (accessed February 2019).



TRL 9 – the actual system is proven in an operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

In terms of the GAP resources, each component was developed in parallel and a majority of the tools have been tested in a variety of environments and refined with feedback from operational partners using “Real World” scenarios.

As a baseline, all the elements of the GAP tools are at TRL6. This is based on the project deliverables and the refinement of the tools based on the workshops and feedback from operational partners as part of trials. In addition, the workshops undertaken with police and military personnel with the use of the GAP tools in the context of their wider Peacekeeping work would support an assessment of the products being at TRL6.

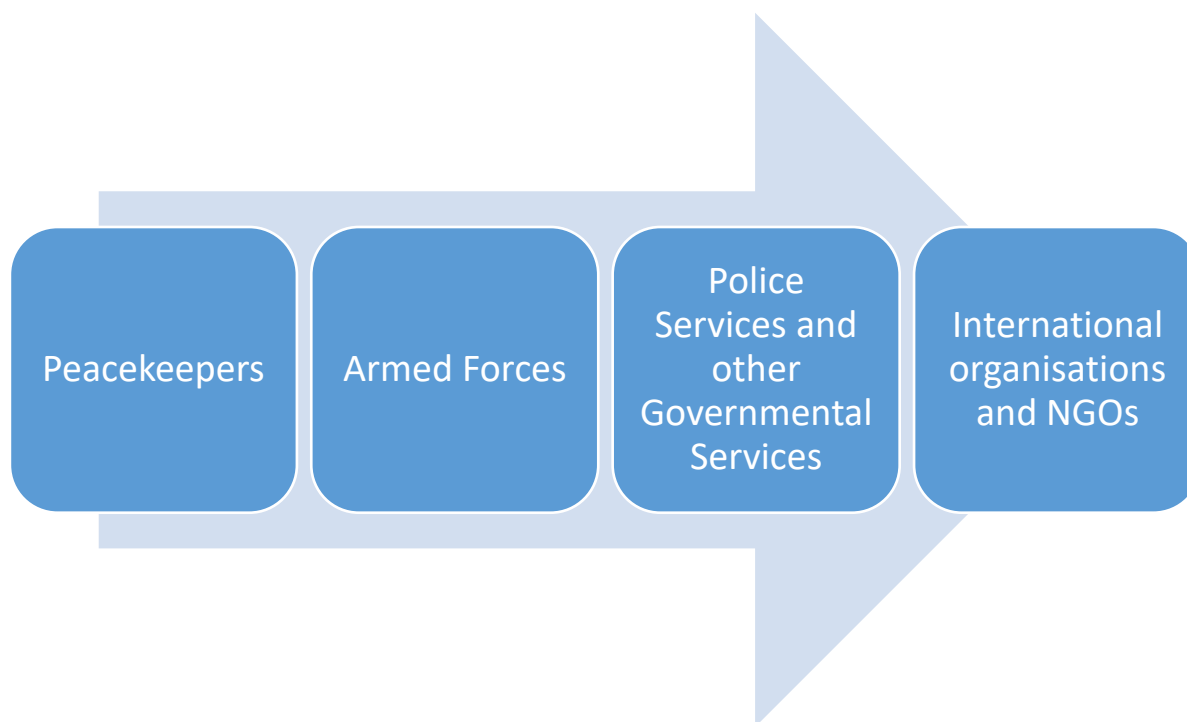
GAP has already reached TRL 6 – Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies). The results were successfully tested during the projects in the relevant environments. As part of this exploitation strategy, we explore the need to keep the development of the tools moving forwards and the aim is to get the GAP tools through to TRL 7 – System prototype demonstration in operational environment and on to TRL 8 (System complete and qualified) within the next 18 to 24 months.

Each of the project partners (including our operational partners) have detailed their use of the system going forwards that includes both the use of the GAP tools internally and the commercial exploitation of these tools. There is also agreement across the project partners to maintain communication links and continue to develop the GAP tools to TRL 9 based on operational feedback but within funding constraints. It is this use and development of the tools that we see as being vital to the evolution of the GAP tools and the achievement of a stable commercial offering at TRL 9.



3.2 Societal Exploitation

Figure 3 Potential societal uses for GAP



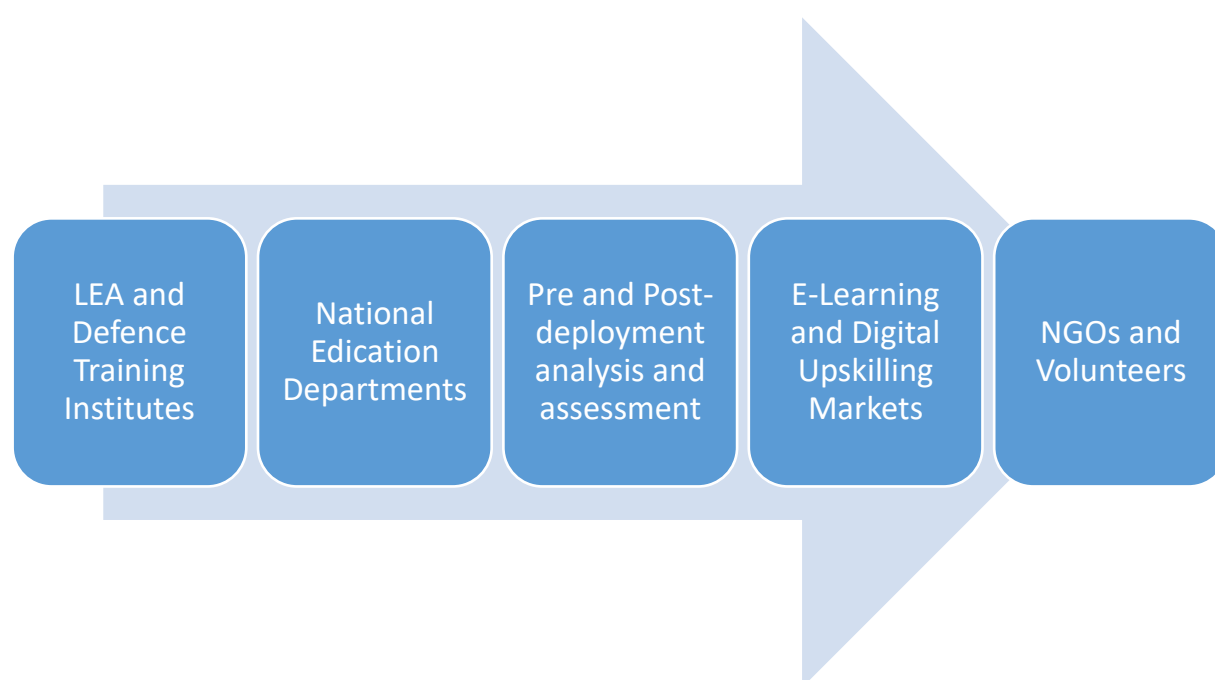
The GAP training materials can be used by defence forces, peacekeepers, government agencies, volunteer groups, and civilian groups as an aid for the preparedness and response phases of deployment to an area of conflict.

For the defence and police service groups in the consortium – the Irish Defence Forces and the PSNI, the value proposition of GAP is as soft skills and preparatory tool for a cross cultural peacekeeping situation, which facilitates effective communication between professionals, the responding community and the affected community. The tools and platform also help in the management of unbound volunteers (those not associated officially with an NGO), as mentioned by ENTRi and UN OCHA during the final conference.



3.4 Educational Exploitation

Figure 4 Potential Educational Exploitation Uses for GAP

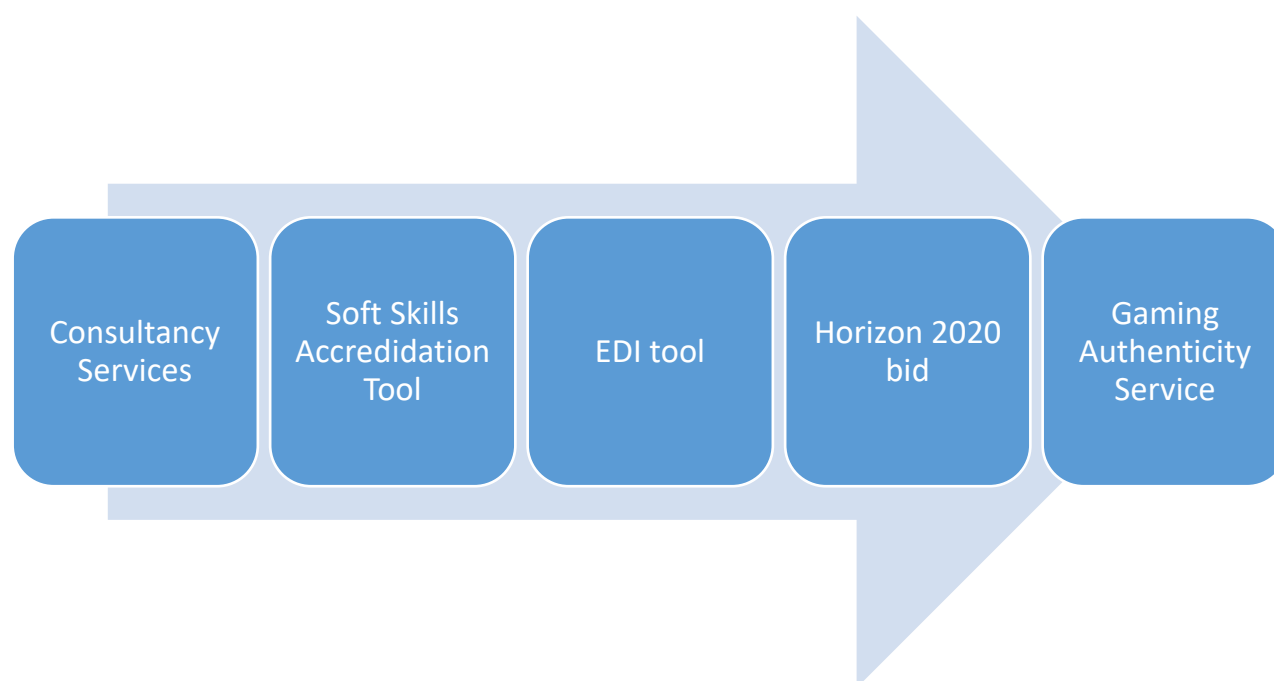


The GAP Game and tools can be used as a training tool by peacekeeping and police service groups, by academic institutions and by SMEs and software developers. The GAP Game can be used as a training tool for volunteers or staff in a humanitarian aid or defence organisation. NGOs, government organisations and private entities can utilise the GAP tool for use in the analysis of a pre and post deployment evaluation. The game can also be adapted for e-learning in an academic or research institute, and the learning and testing already undertaken by the consortium during the project can be built on.



3.5 Commercial Exploitation

Figure 5 Potential Commercial Exploitation Uses for GAP



The GAP consortium members all have the potential to leverage their contacts and promote the game and assessment feature as a commercial option.

For private enterprise, the potential to teach soft skills and accredit these skills for their employees make GAP optimal for a corporate bespoke suite of soft skills offerings. The soft skills gap is a very real chasm to overcome, not only for a more efficient workforce but also in direct response to the very real need for more equality in the workplace, highlighted and embedded in the zeitgeist of MeToo Movement.¹⁵

¹⁵ Lorri Freifeld, 2016, Bridging the Skills Gap *Employers Want Certain Skills. Employees Don't Have Them. Why? And What Can Organizations and Training, Employees, And The Educational System Do To Eliminate The Disconnect?* Available here: <https://trainingmag.com/trgmag-article/bridging-skills-gap/>. See also <http://www.tuningjournal.org/article/view/1063/1273>



The research and learnings that have emerged from the project may form the basis for a successful Horizon 2020 bid in **August 2019**, giving the opportunity to obtain funding to further develop the GAP concepts and methodologies.

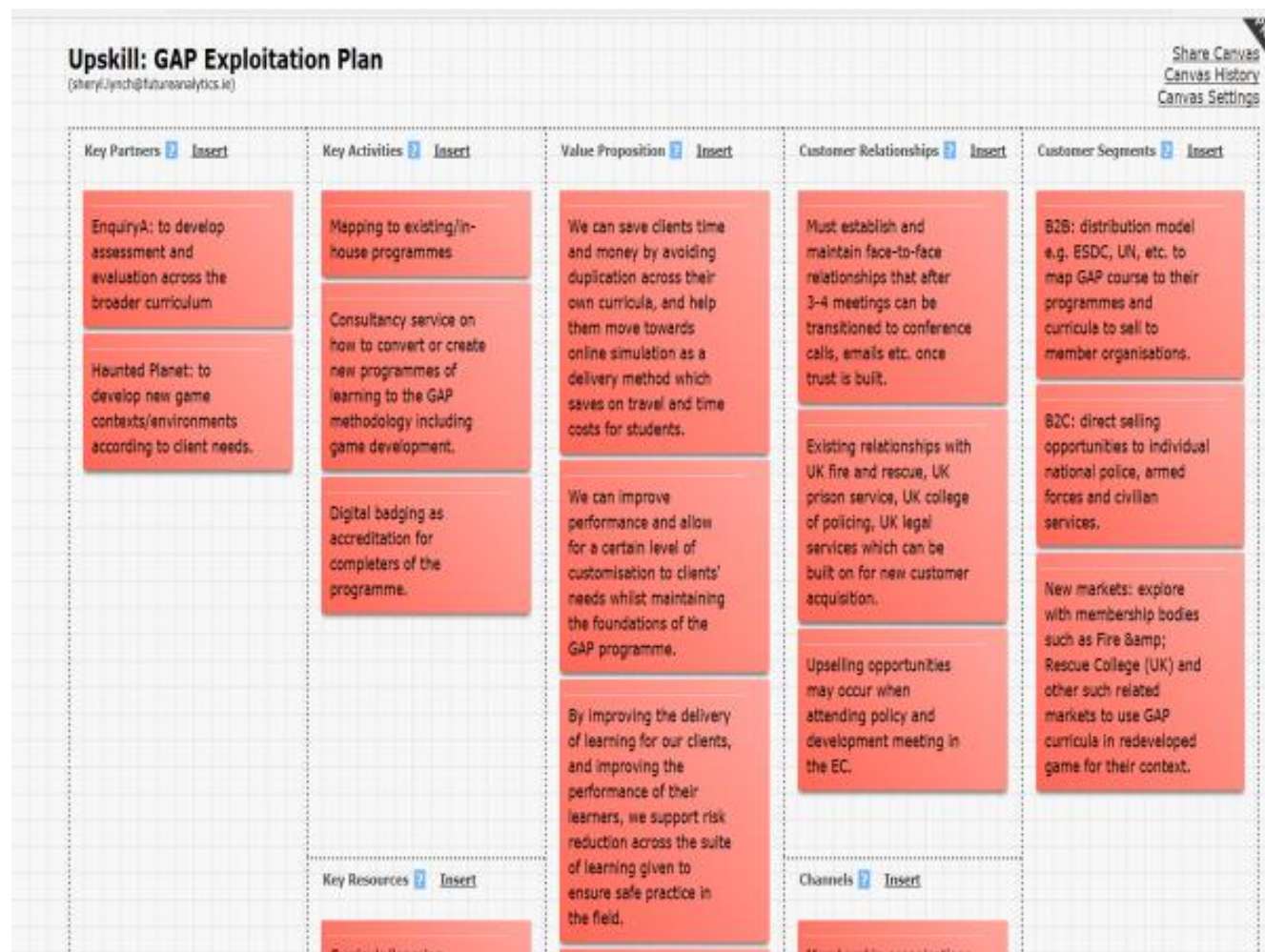
3.6 From an IT, Software and Game Developer Perspective

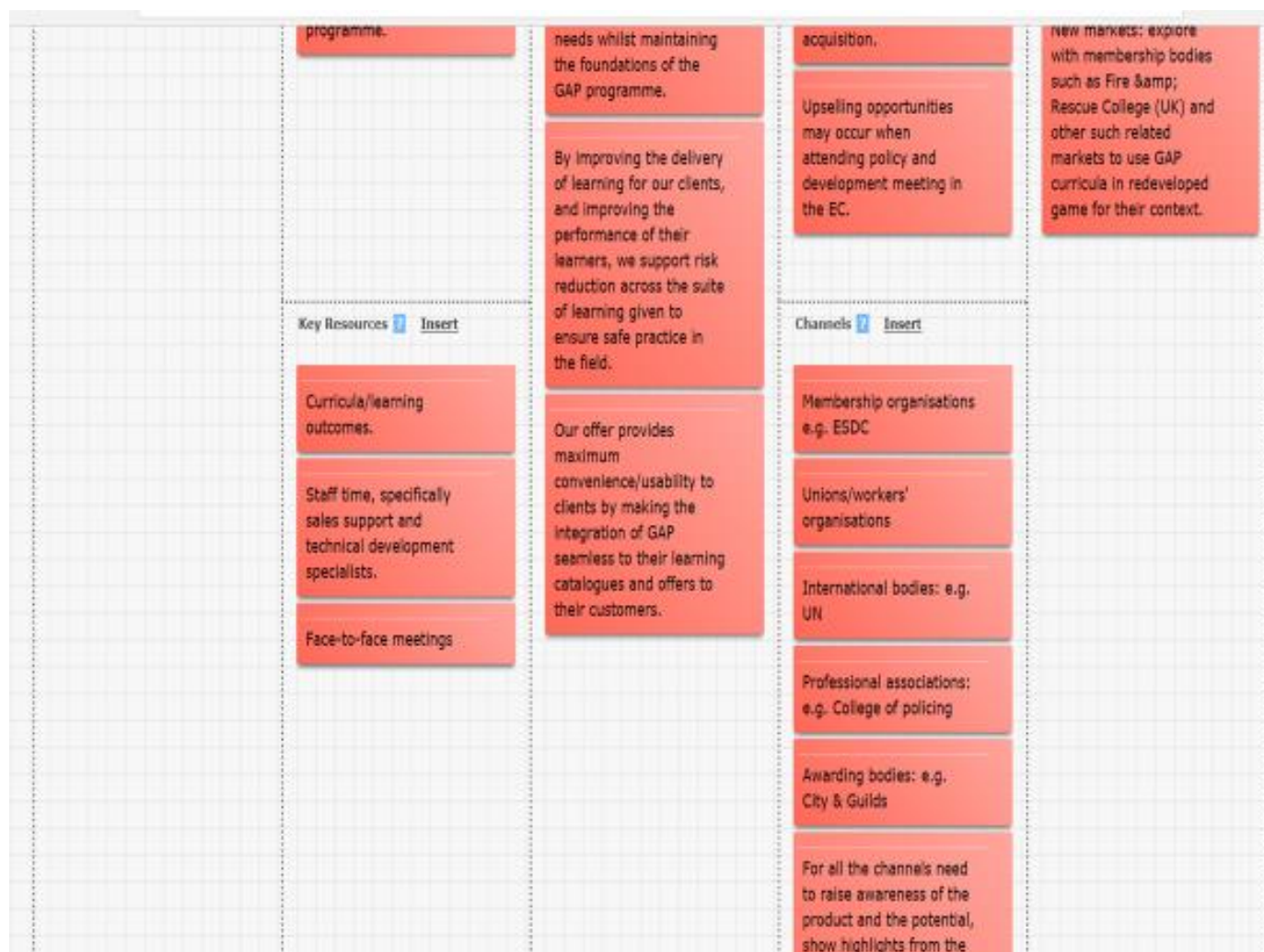
Partners involved: Upskill/Haunted Planet/ADAPT (TCD)

The GAP Game and the digital assessment model and interface that is incorporated in this form the basis for the exploitable foreground for the IT and software and game developers in the consortium. Below are the BMC of the some of the key GAP consortium members from IT, Software and Game Developer Perspectives.



Figure 6 Upskill BMC





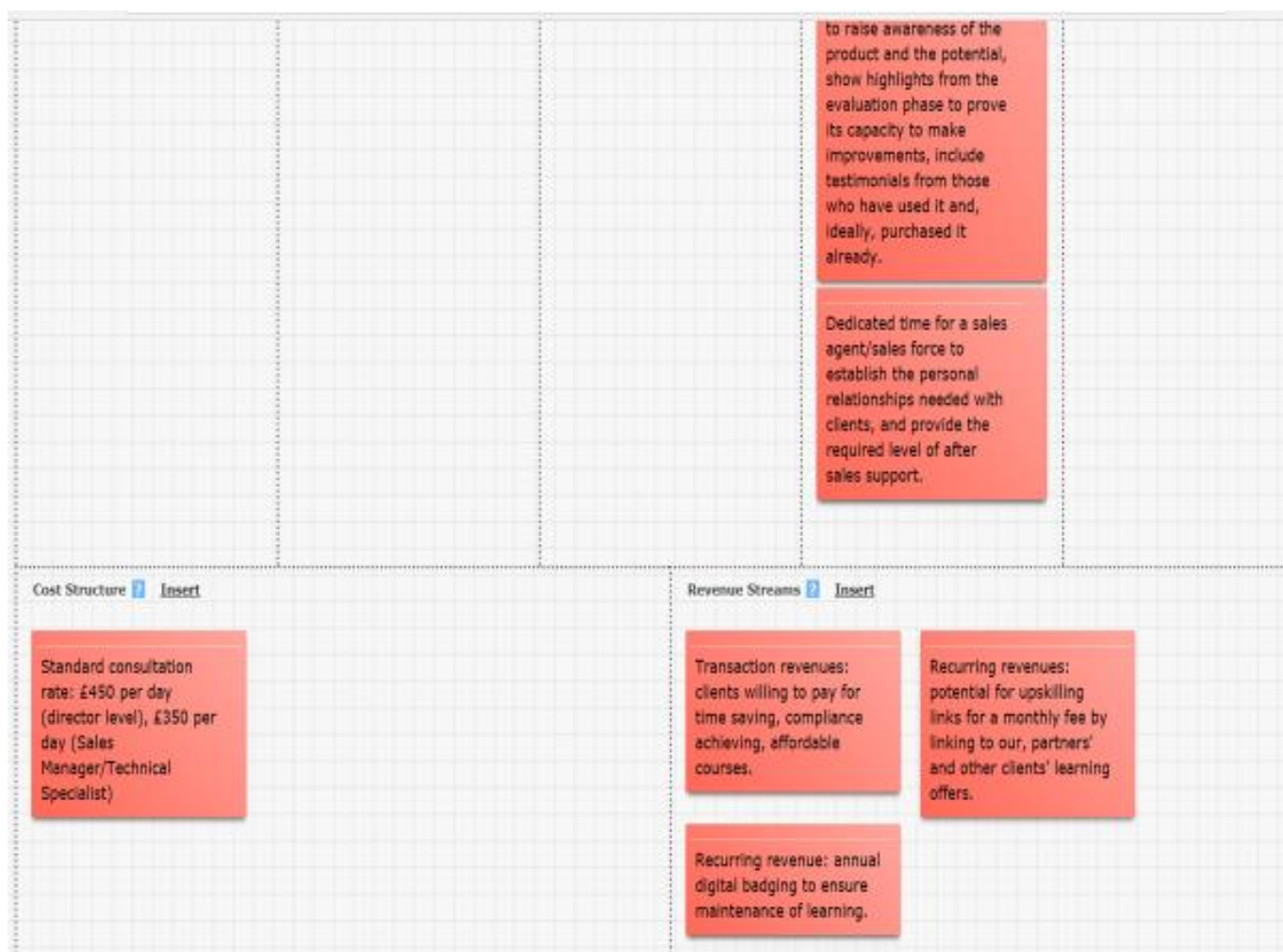
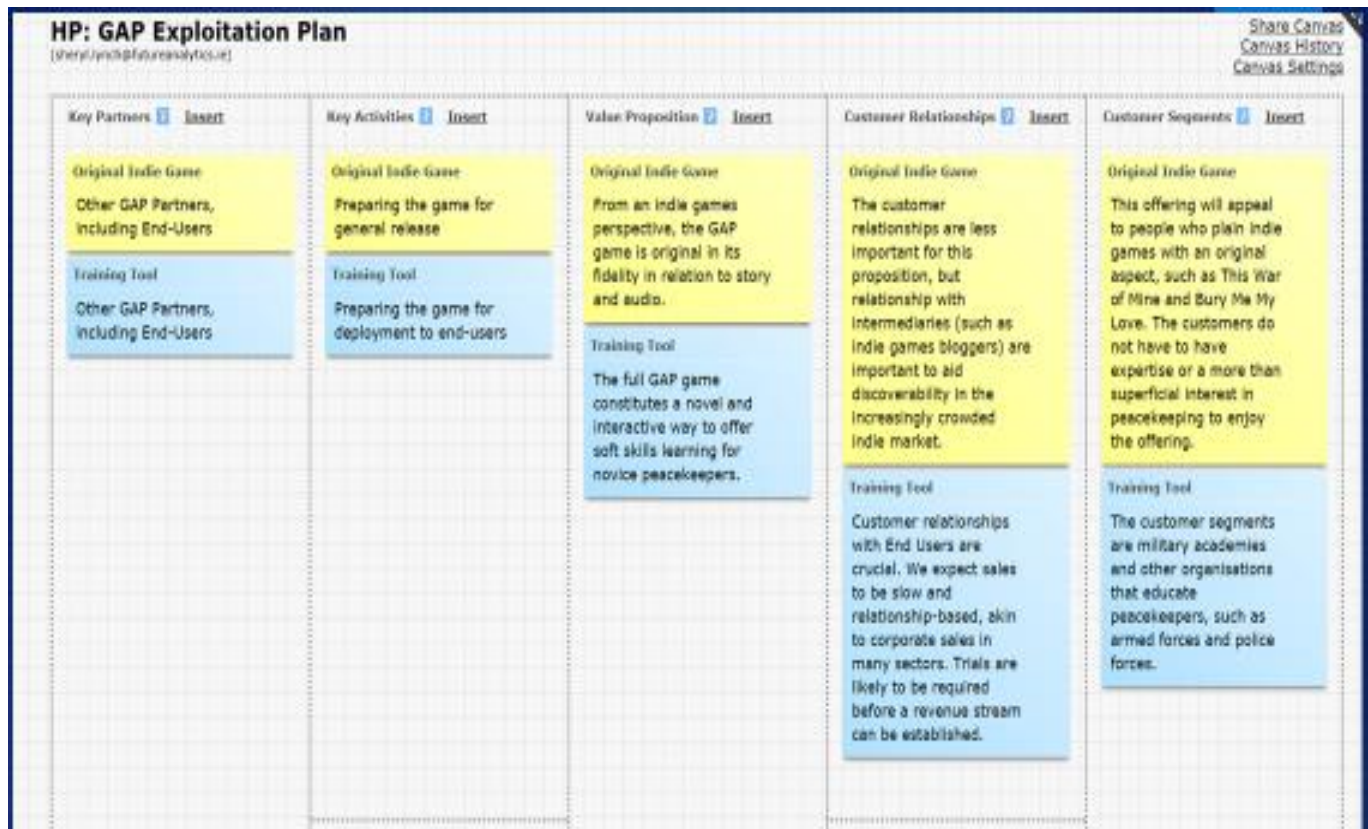
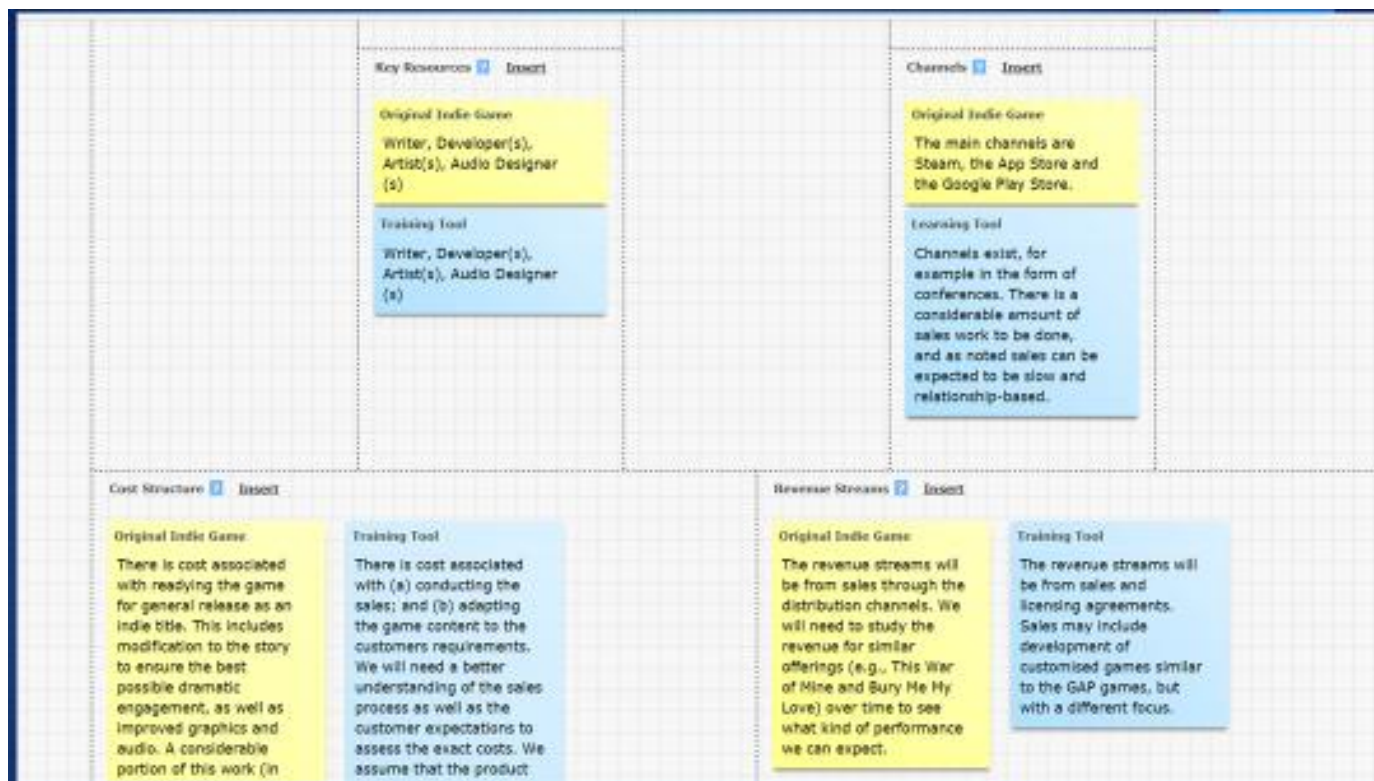
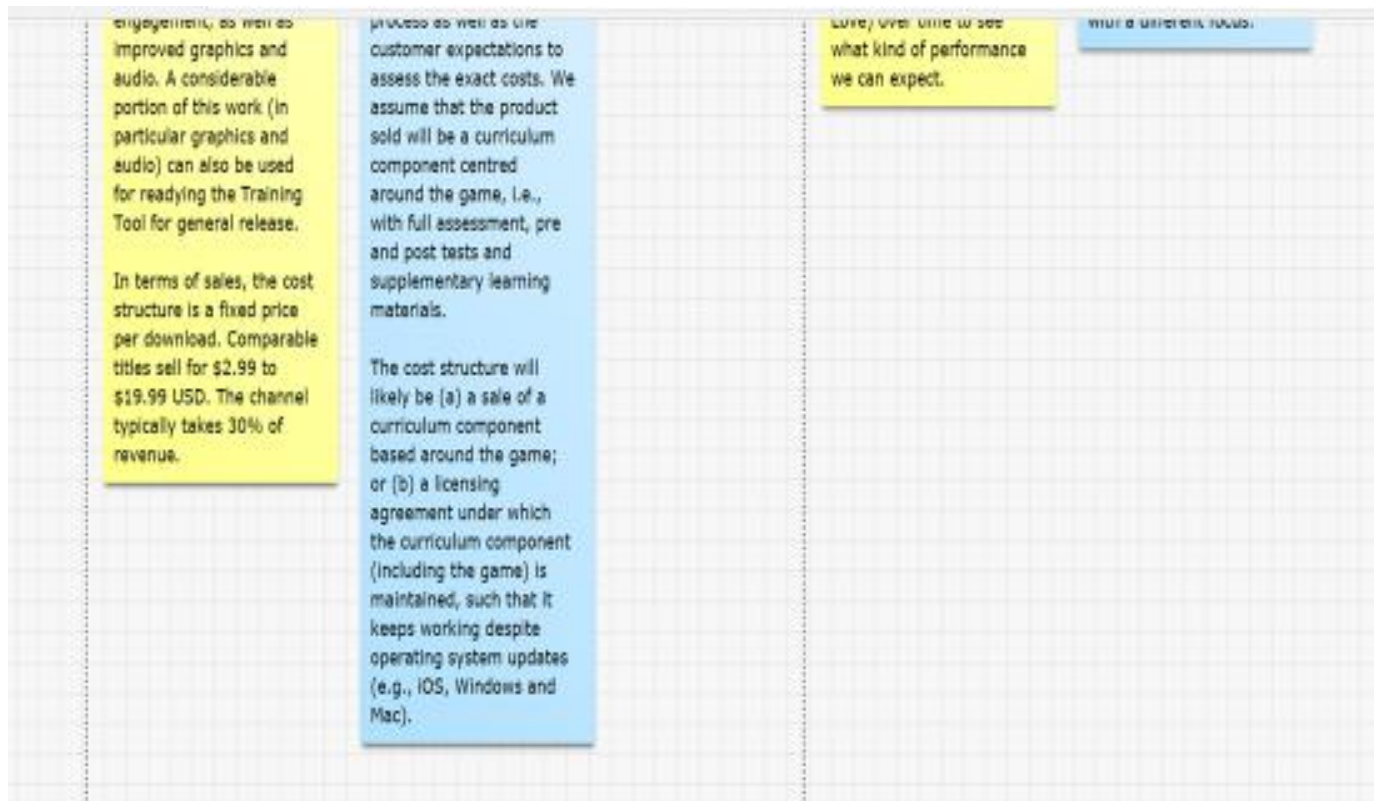




Figure 7 Haunted Planet Studios BMC







3.6 From an Academic/Research/SME Perspective

Partners involved: TCD/WSU

Below are the BMC of the some of the key GAP consortium members From an Academic/Research/SME Perspective.



Figure 8 Enquiry BMC

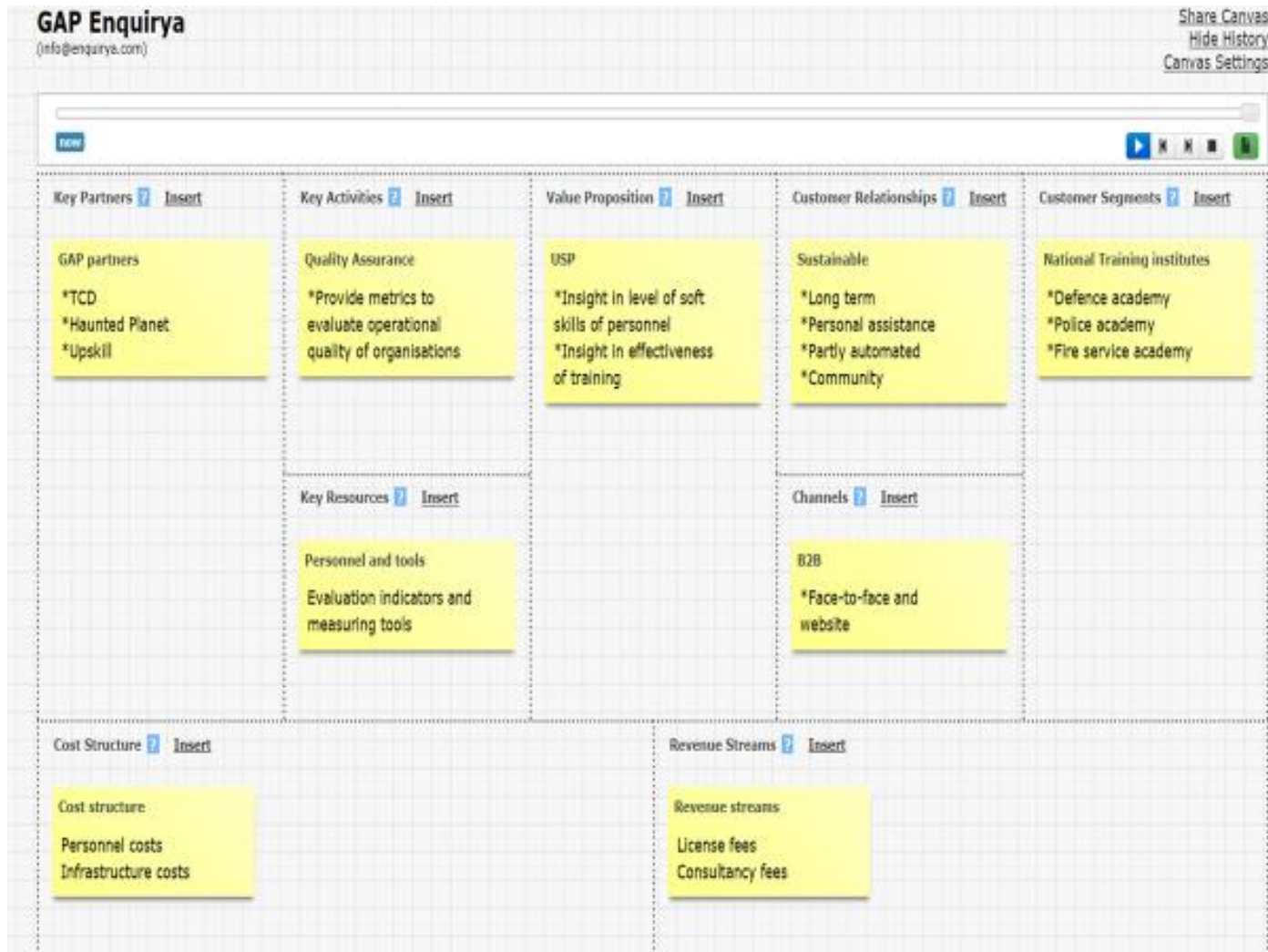
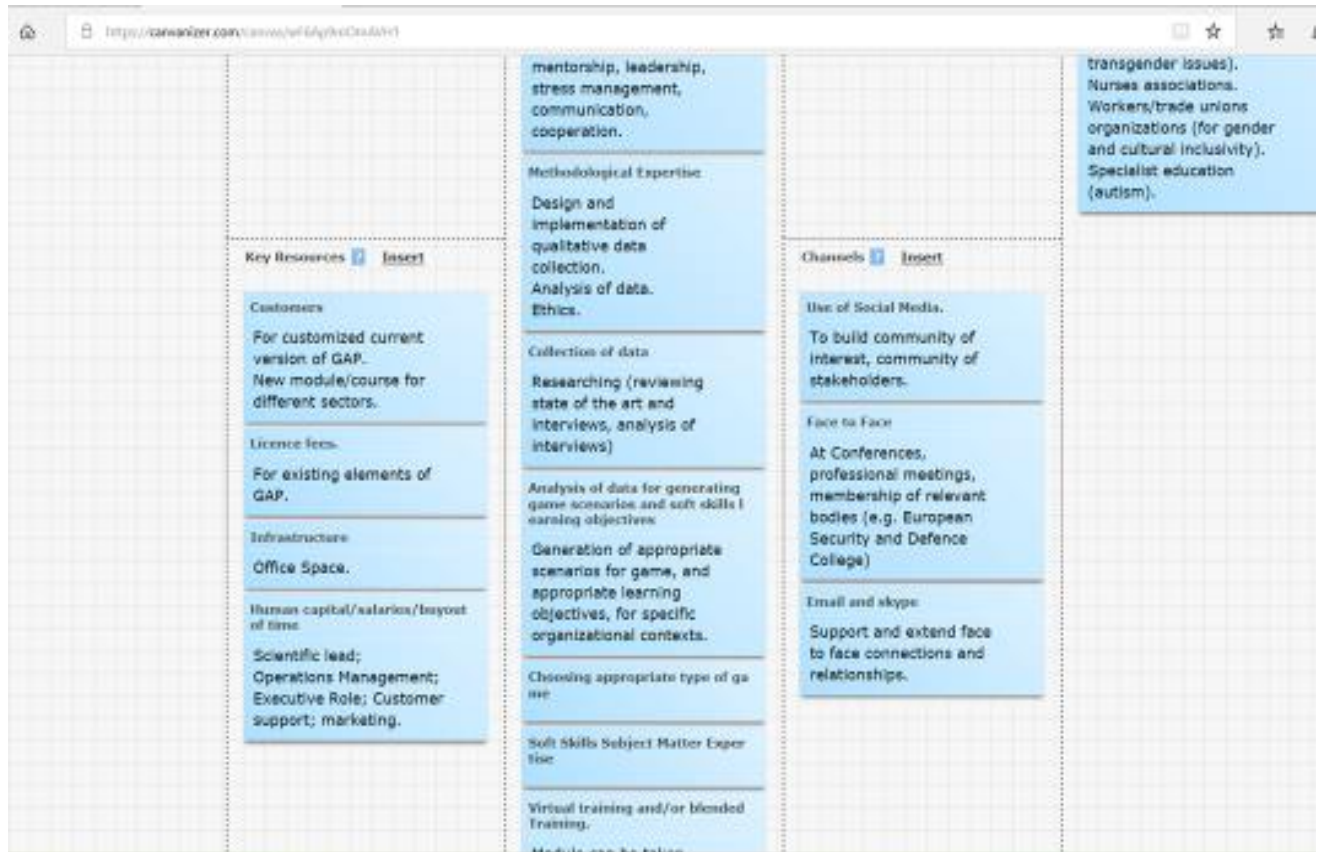
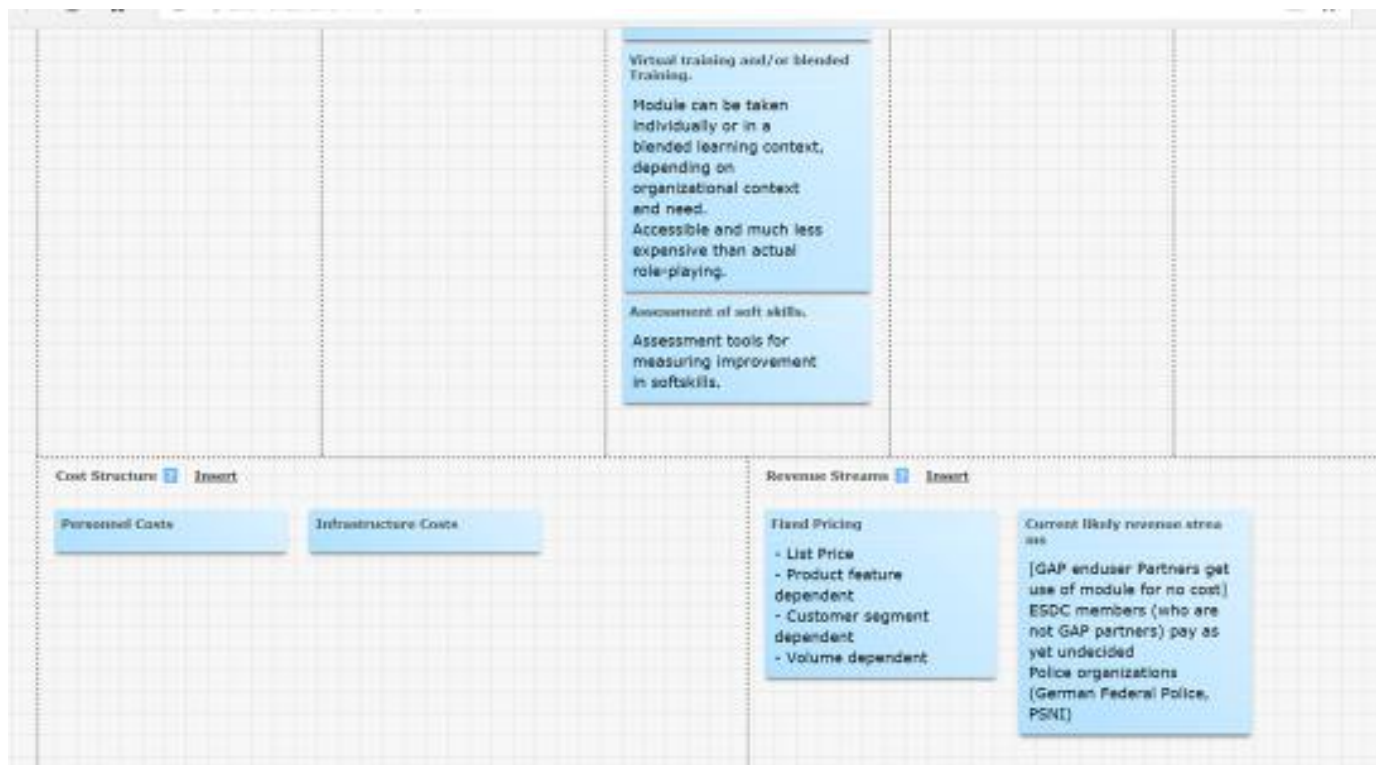




Figure 9 TCD BMC









Brainstorming Space ? Insert Brainstorm Mode

The plan is to create a new industry with the focus on training personnel in organizations in 21st century or soft skills through collection analysis of lived experiences to create game scenarios and learning objectives for delivery through a digital game. Assessment will document improvements in these skills and these can be tied to established accreditation schemes. The sky is the limit in terms of potential customers, from corporate to education to health to international business education. It ties together expertise in behaviour (social sciences), education, technology, to deliver training that greatly enhances the use of resources whilst improving skills that produce a more equitable and just, and enjoyable working environment, and society. GAP can fill this gap.

Sent to Brainstorm Mode.

If you can't access let me know. Basically the sky is the limit for delivering this type of training in this way.

The research and publications from the GAP project can be used to pitch for funding for new research projects and exploited to interested parties who wish to build upon the knowledge already gathered.



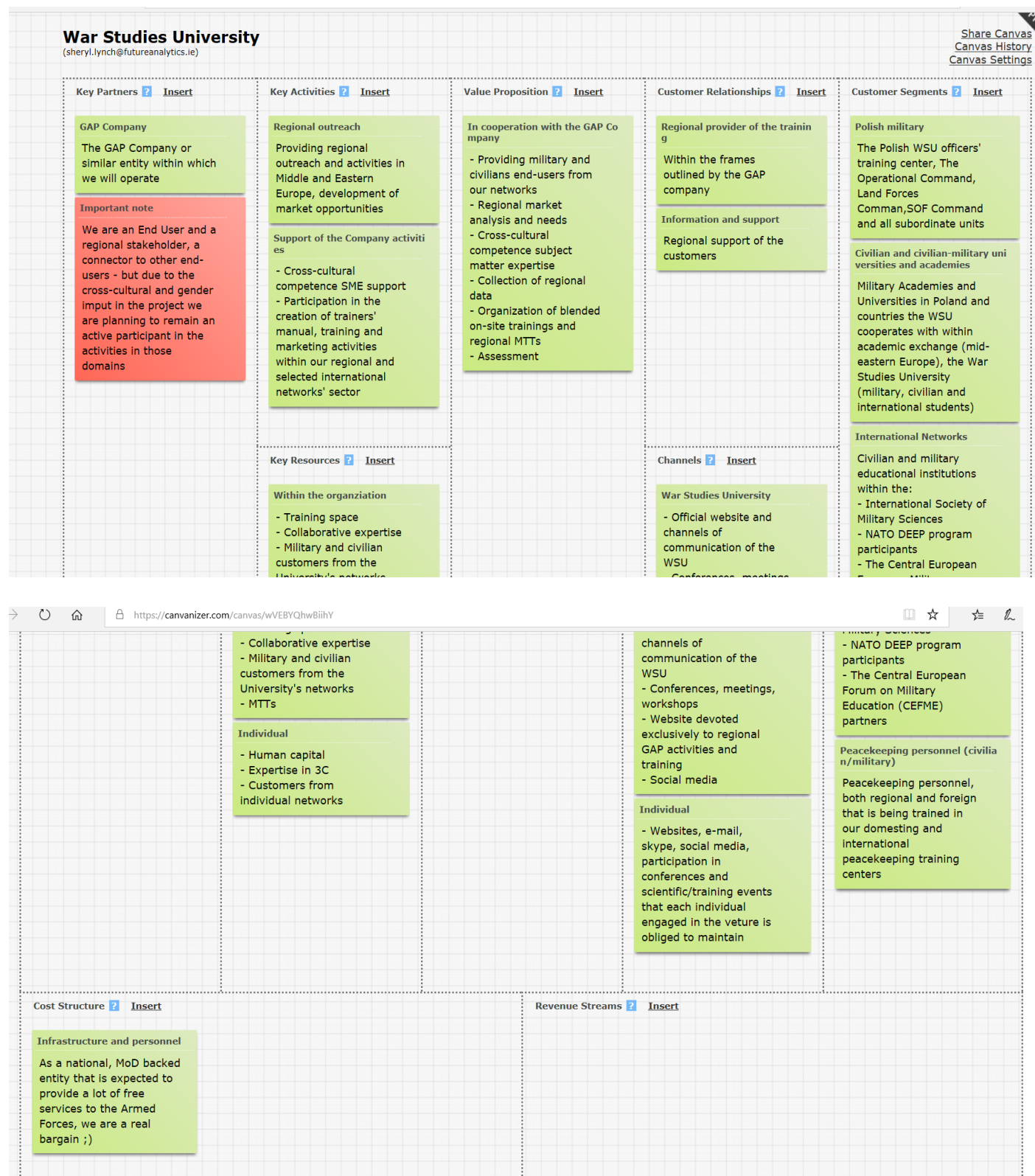
3.7 From a Peacekeeping/Defence Professionals Perspective

Police Service of Northern Ireland (PSNI); Defence Forces Ireland (DF); National Defence University (Fincent) AB; Wyższa Szkoła Policji W Szczytnie (WSPol); Institut Po Otrbrana (BDI); Ministerio Da Administracao Interna (PSP); Polish War Studies University and its Officers Training Center (WSU).

For the Peacekeeping/Defence professional groups in the consortium – the value proposition of GAP is an effective complementary training resource which facilitates operative communication between professionals, the responding community and the affected community. The tools and platform also help in the management of unbound volunteers, as proven by the GAP testing and trial work in AW 2018. The GAP ‘platform’ and game can be used by the groups as training tools for volunteers by using a simulated peacekeeping mission scenario to enable best practice to be demonstrated. An added value of those exploitation environments, in particular the security and defense academies, is that they also provide training and education to civilian students that already occupy or will take positions in S&D institutions that deal with policy issues, which will provide a bit more unified perspective and understanding of the operational environment and it demands that we lack today.



Figure 10 War Studies University BMC





4. GAP – Seven Opportunities for Exploitation

The GAP consortium has agreed on seven possible opportunities for exploitation which are not mutually exclusive and indeed, several will be explored simultaneously.

4.1 A European or Governmental Resource for Peacekeeping Training

This is the most ambitious use of the platform and tools and one where it would be most effective.

- **Which partners should exploit this?**

Peacekeeping professionals (military and police services) have the volunteer base to showcase the platform and the practical knowledge to demonstrate the issues with collaboration gaps that may exist and to show how GAP helps to ameliorate them. This cohort also have key contacts with community groups as well as government at a local and regional level.

SMEs also have the contacts with local and national government and can illustrate to the customer the link between sectoral training and skills matching needs with the capacities that GAP outputs address.

- **What are the commercial opportunities?**

A mandate from either the ESDC or national government (s) to use the GAP platform and system as a primary tool in peacekeeping preparedness and response would mean that funding would come from there to buy the platform and related foreground – mobile application, licence, maintenance agreement and background knowledge.

Revenue streams would therefore be both once off for the purchase of the software, and ongoing for the licences, updates and training.

- **How should GAP be exploited with this end user?**



Inviting the representatives of the relevant authorities to a meeting where a presentation of the project is accompanied by real life testimonies from members of the consortium and responding professional groups who took part in the evaluation exercises. This has already been achieved during the training and subsequent Final Conference in TCD in January 2019 but the consortium plan to continue this engagement with a schedule of meetings with local government and long-term communication and commercial agreements with the ESDC.

4.2 GAP as a Volunteer/Citizen Training Tool

- **Which partners should exploit this?**

As stated above, Peacekeeping Professionals have the volunteer base and knowledge to best utilise this as a training tool. As iterated by ENTRi at the Final Conference, citizen training is tantamount to peacekeeping operations as the work of diplomats, volunteers and NGOs should be in harmony with deployed personnel in areas of peacekeeping operations. Homogenous soft skills training in gender and cross-cultural awareness is one way of fostering cohesive operations and cooperation between the two sectors.

- **What are the commercial opportunities?**

The larger NGOs and peacekeeping/disaster recovery agencies will have a budget to invest in opportunities for training and software updates and could purchase the platform, app and all related foreground. Alternatively, one or more agencies could pool resources and invest in the tool to ensure interoperability across the board.

Revenue streams would be once off for the purchase of the software, and ongoing for the licences, updates and training.

- **How should GAP be exploited with this end user?**

As several groups in the consortium are already peacekeeping professionals, the exploitation of the GAP platform and methods to their own groups should require minimal effort and their personnel are already au fait with GAP through their cooperation on the



testing of the game. As links between other, similar peacekeeping response groups are also likely, a group discussion with a presentation and discussions about the problems in collaboration and the management of unbound volunteers and the solutions to that the project has uncovered should form the basis of the exploitation strategy.

4.3 GAP Outputs As The Basis for a Horizon 2020 Bid

- **Which partners should exploit this?**

The project lead may be in the best position to exploit the outputs from GAP as the basis for another EU-funded project, to further explore the possibilities of the software and the practices which have evolved during the life of the project.

What are the commercial opportunities?

A successful application for funding to extend the project or begin a new one building on the knowledge from GAP would bring in substantial revenue over the next three years.

How should GAP be exploited with this end user?

A written proposal should be submitted to the European Commission as with the GAP and other EU projects.

4.4 GAP as an Online Service

- **Which partners should exploit this?**

The project lead in collaboration with the IT and developer partners are in the best position to exploit the outputs from GAP as an online service. As public procurement is the method for acquiring goods and services for EU public service departments (such as Defence, Foreign Affairs, and Security) the expectation is that our European-funded project will be available for public services within the EU, satisfying the ambition of a circular economy and



exploiting research for overall betterment of European society. Freemium is one of several options that should be considered. It could also be a conventionally priced service, e.g., with a simple monthly or annual fee.

- **What are the commercial opportunities?**

‘Freemium’ is a pricing strategy by which a digital product or service is provided free of charge, but money is charged for proprietary features or functionality. In this instance, freemium (although not the only option presently) refers to the fact that the Peacekeeping Professionals would be charged a premium (licensing, purchasing the software) to use the GAP platform but access to the online space or the mobile application is free to all other users - i.e. the Affected Community and the Responding Community.

- **How should GAP be exploited with this end user?**

An initial agreement with the ESDC should be submitted, agreeing a 12 month SLA.

4.5 GAP Platform as an Online Open Access Resource

- **Which partners should exploit this?**

This option would be expected to reach broader market segments and end-users as readers of Open Access Resources such as Wikipedia, MOOC or via a popular policy training forum with the EU, Iversity.¹⁶ The academic or software partners may be most suitable to collaborate on this plan.

- **What are the commercial opportunities?**

This resource would rely on third-party funding such as from the EU or an established network. Revenue could also come from public donations, crowdsourcing, and/or from relevant advertising. The addition of GAP and the outputs from the project to the public domain would add to

¹⁶ <https://iversity.org/en/courses/regions-eu-institutions-and-policy-making>



the knowledge bank in the peacekeeping arena although it is unlikely to have a significant monetary return.

- **How should GAP be exploited with this end user?**

The end user in this case is the hosting site (e.g. Wikipedia), which is accessible to all therefore no requirement for exploitation as such. The consortium would submit an article on Wikipedia to promote the project results and pursue other free online resources to disseminate content/promote the product.

4.6 GAP as Corporate Soft Skills Training Tool

- **Which partners should exploit this?**

This option would be expected to reach broader market segments and end-users such as Google, PwC, Accenture, and Deloitte in collaboration with D&I (Diversity and Inclusion) working groups such the 30% Club, Athena SWAN, LeanIn, and TENI (Ireland). Potential joint partnerships between Consortium members including the academic, SME game and software developer partners may be most suitable to exploit this option.

- **What are the commercial opportunities?**

This resource would rely on third-party funding such as from the EU or an established network. Revenue could also come from public donations, crowdsourcing, and/or from relevant advertising.

The addition of GAP and the outputs from the project would form a suite of tools that would serve to bolster a more tolerant and diverse workforce.

- **How should GAP be exploited with this end user?**

The end user in this case is the company/HR manager/ D&I working group/individual employee and should be reached advertising, face-to-face workshops whereby a GAP member demonstrates the tool/game and its associated benefits such as accreditation in terms of a DPD asset.



The GAP platform can provide a real-time situational awareness overview of an area which facilitates more understanding of D&I in a novel, powerful way.

4.7 GAP as Corporate Soft Skills Training Tool

Several employers (private, public or NGOs) form a legal entity to provide participating firms with qualified and reliable staff at a reasonable cost, with the following goals:

- jointly finance vocational training and further training;
- secure employment of workers at risk of dismissal because of poor economic prospects of a member company;
- improve the economic development of the participating firms and that of the region by helping to provide better flexibility, anticipation, strategy and innovation skills, expansion and diversification potential.

Employer groups (AGZ) are typically established either by micro business and SMEs or are the result of a regional, sectoral collective agreement. The establishment is often preceded by a feasibility study to investigate regional demand for an AGZ and the feasibility of combining different employers' need for labour. Workers are recruited on the basis of an assessment of the needs of each member company.

According to one AGZ website¹⁷, it describes these mergers as, "associations of companies that share skilled workers. In the spirit of cooperative human resource management, they bring together and reconcile the labor demand, which goes beyond the permanent staff of the member companies. The European Commission defines this policy approach as: "Flexicurity is an attempt to reconcile two basic needs - flexibility and security. This combination could be the answer to the EU dilemma of how to ensure and enhance global competitiveness while maintaining the European social model. "

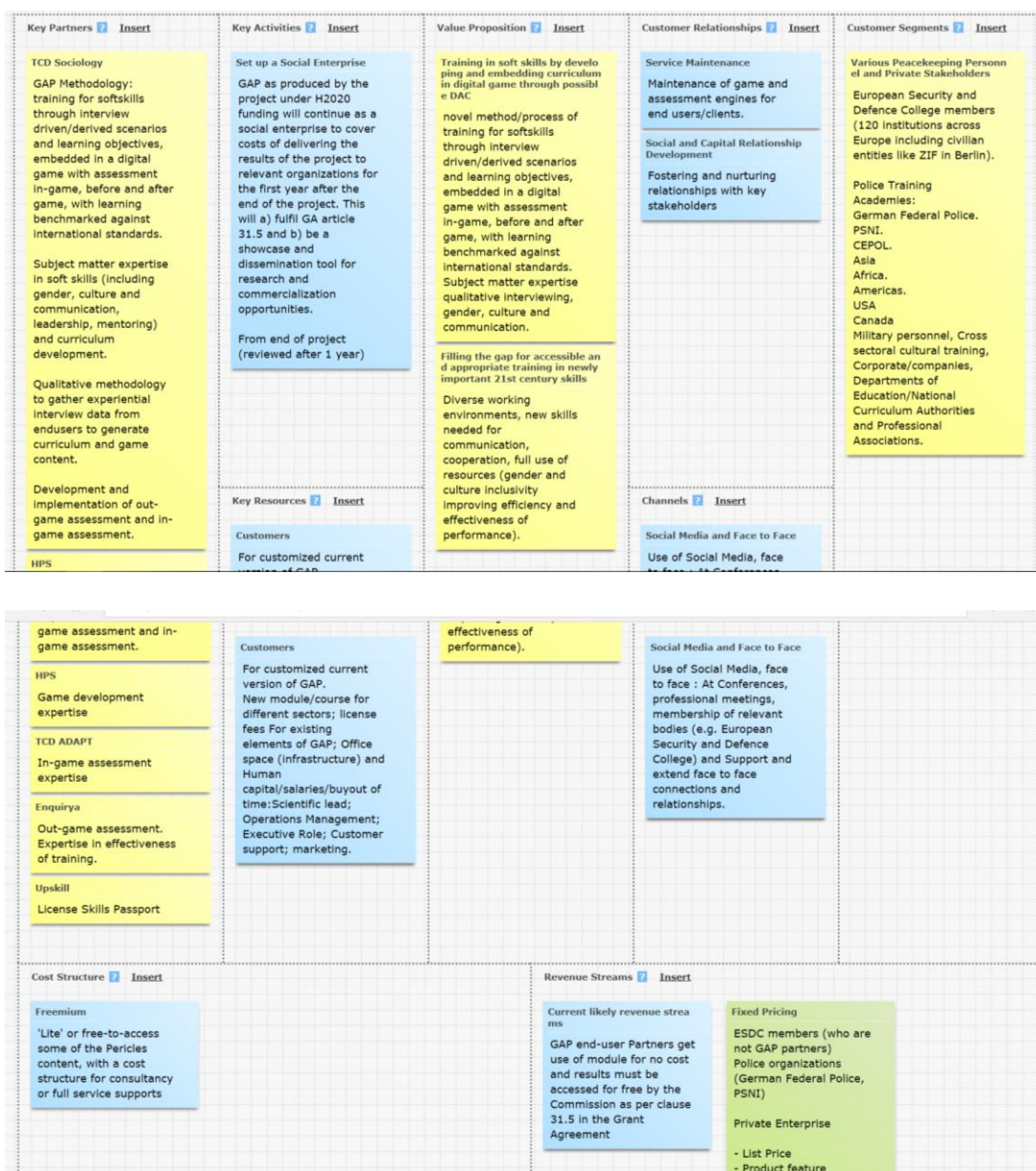
Lessons for GAP: whilst this is very much focused on setting up co-operatives of workers and organisations there are lessons in how a sector can come together to train and deploy

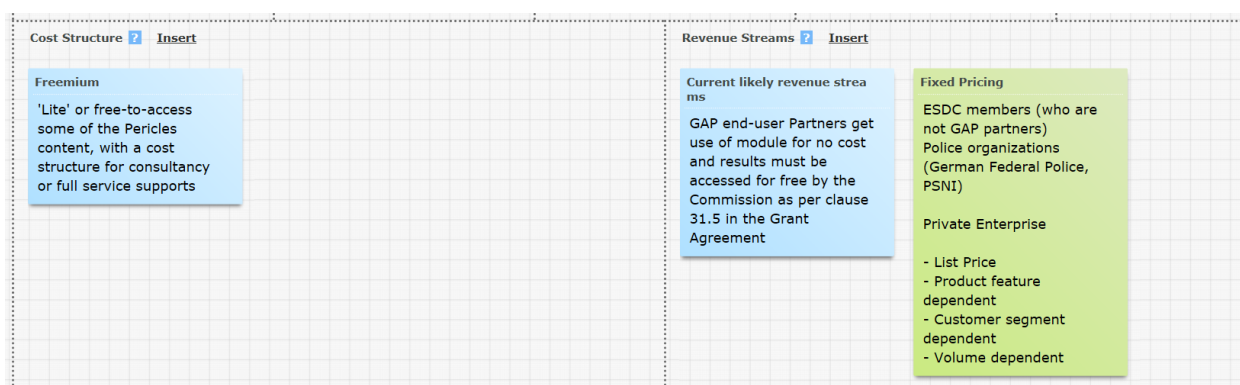
¹⁷ http://agz.progressnetz.at/was_ist_ein_agz/agz_fibel/ (accessed 040119)



skilled employees together. This system again puts weight on competence, skills and vocational experience as the GAP passport will. Flexibility and diversification strengthen the sector which is the aim of the GAP passport and the cross-actor learning approach.

4.8 A 12-month GAP BMC





5. Exploitation Plans of Key Groups in Consortium

5.1 Peacekeeping Professionals

- Police Service of Northern Ireland (PSNI);
- Defence Forces Ireland (DF);
- National Defence University (Fincent) AB;
- Wyższa Szkoła Policji W Szczytnie (WSPol);
- Institut Po Otrbrana (BDI);
- Ministerio Da Administracao Interna (PSP)
- War Studies University (WSU) and the Polish Armed Forces

The Peacekeeping Professionals Perspective

The BMC report from the Peacekeeping Professionals in the consortium suggests that the main customer for the GAP product is the ESDC (Europe) and its member state bodies.

The product would need to be adaptable nationally – in the local language and tailored to the procedures already in place. However, the English-language version is of particular



importance to personnel to be deployed, since it trains specialist language that will be used during the deployment.

Key partners in the process are the ESDC, the Academy for Crisis Management and Emergency Planning (AKNZ) in Germany or similar national body and national defence, police and NGO bodies.

The partners will continue to utilise newsletters, articles in trade magazines and conferences to exploit the GAP product, using existing connections to other projects.

Revenue streams would be ongoing as the service would need to be retained and maintained to be effective for the customer.

Table 3 The War Studies University Exploitation Strategy

Activity	Brief Description of Activity	Timescale
Exploitation	Maintenance of the regional version of the GAP website (at the WSU website) that has been up and running during the time of the project. Social media presence and regular updates. Continued dissemination of the project at international conferences and in publications.	First year
Partnerships	Running the Game through the Polish Advanced Distributed Learning Platform – which serves the Ministry of Defense and all subordinate institutions. Possibility of non-commercial sharing the content with the American ADL Laboratory that the WSU is a part of – if allowed.	As long as possible and needed. Depending on the resources and the interest in the game, realistic frame is the next couple of years with an updated version, our Introduction to Cultural Awareness online course has been up and running since 2012 so the



		perspectives are good.
Networking and Business Collaboration Opportunities	<p>Promotion of the Game in entities, groups and societies that the Polish WSU is a part of and collaborates with, including the International Society of Military Sciences, Members of the NATO DEEP program, NATO STO or the Central European Forum on Military Education to mention a few.</p> <p>The Game as a part of the Cross-Cultural Competence for CSDP Missions and Operations Course for the ESDC that is planned to be held at the WSU in 2020.</p>	<p>As long as possible and needed. Depending on the resources and the interest in the game, realistic frame is the next couple of years with an updated version, our Introduction to Cultural Awareness online course has been up and running since 2012 so the perspectives are good.</p>
Other	<p>Including the Game and training in training activities of the Polish Armed Forces and Ministry of Defense that are organized at the WSU – in for instance, the annual Officers' Training Center Operationalization of Culture course or the Higher Defense Courses for civilian government professionals.</p> <p>Continuous use of the Game as a part of educational and training curriculum of the University, also for strictly civilian graduates.</p>	<p>As long as possible and needed. Depending on the resources and the interest in the game, realistic frame is the next couple of years with an updated version, our Introduction to Cultural Awareness online course has been up and running since 2012 so the perspectives are good.</p>



Table 4 PSNI Exploitation Plan

Activity	Brief Description of Activity	Timescale
Exploitation	Continue to promote the GAP game concept within the organisation, particularly within the Police Training college environment	March 19 onwards
Partnerships	Potential to work with existing GAP Partners, to develop a game that is aimed at soft skills in a frontline operational policing.	April 19 onwards
Networking and Business Collaboration Opportunities	Continue to work with GAP project partners to maximise impact of the GAP results. Network within organisation and other government departments to secure budget to develop a soft skills game for front line policing, using the GAP game format/concept.	April 19 onwards
Other		



5.2 Academics/Research/SMEs

- TCD
- Future Analytics Consulting Ltd
- Enquirya
- NUIM

The Academic Perspective

The BMC report from the academic members of the consortium indicates that the primary customer for the GAP product are teaching and training organisations for eventual foreign deployment and Educational Departments that could be leveraged to integrate GAP into school's programmes regarding soft skills training.

Key partners in the process are ESDC, UN OCHA, WFP, Cordaid and other government departments such as the Department of Foreign Affairs and the Department of Education.

The partners will use personal and professional contacts and presentations at professional conferences to exploit the GAP product.

Revenue streams would be ongoing as the service would need to be retained and maintained to be effective for the customer.

Table 5 Enquirya Exploitation Plan

Activity	Brief Description of Activity	Timescale
Exploitation	Dedicated website page on enquirya.nl (Dutch) and enquirya.com (English) promoting and linking to the project's final results website. The sites are accessed by a Dutch and Flemish community and international network. Continuous promotion using available leaflets at relevant meetings, making reference to GAP results in companies blog posts.	Year 1 – first 12 months



Partnership	Potential to work with end-user organisations to explore measurement of effectiveness of training. Promote the services of Haunted Planet to other learning content developers looking for digital expertise and capacity. Maintain communication with the GAP partners to share feedback on resources.	April 2019 onwards
Networking and business collaboration opportunities	When working with first responders contacts, the GAP results will be promoted. Continue to promote the GAP results with EU CSDP networks, HEIs, training providers, and government agencies. Potential collaborations with Laurea and NUIM on future projects.	April 2019 onwards

Table 6 TCD/ADAPT Exploitation Plan

Activity	Brief Description of Activity	Timescale
Exploitation	TCD is establishing a spin-out company offering customized versions of GAP and new iterations to customers in the security, defence, education and corporate sectors. The core methodology of consultation with end users, gathering user experiences yielding game scenarios and learning objectives, and the GAP in-game and out-game assessment will be offered by TCD. Partners in GAP, including the SMEs, are potential partners in new iterations. Social Enterprise – see below.	From the end of project
Partnerships	Potential to work in terms of research, development of training tools, and dissemination of same with current partners in GAP, including	From end of project



	NUIM, Laurea, UU and WSU; SMEs; and end user organizations in the above sectors. Application for further research funding.	
Networking and Business Collaboration Opportunities	We continue to engage with stakeholders to provide expertise, service and training materials and to promote awareness of them. ESDC is the core network in the area of security and defence. Also continuing networking and collaboration opportunities with current end user partners, UN organizations, EU organizations, NATO, POTI in the US, the Irish government Department of Foreign Affairs, and the Department of Education, Skill Net Ireland.	Ongoing
Social Enterprise	GAP as produced by the project under H2020 funding will continue as a social enterprise to cover costs of delivering the results of the project to relevant organizations for the first year after the end of the project. This will a) fulfil GA article 31.5 and b) be a showcase and dissemination tool for research and commercialization opportunities.	From end of project (reviewed after 1 year)

Table 5 LAUREA Exploitation Plan

Activity	Brief Description of Activity	Timescale
Exploitation	Inclusion of the game to the training courses	2019-2020
Partnerships	ESDC, NORDEFECO	
Networking and Business	IAPTC	



Collaboration Opportunities		
Other		

Table 6 The Kennedy Institute (NUIM) Exploitation Strategy

Activity	Brief Description of Activity	Timescale
Exploitation	Dissemination of the project on academic programmes (Masters, diplomas and certificate), at international conferences and in publications.	For next 3 years
Partnerships	The Kennedy Institute is the Irish representative on the Executive Academic board of the ESDC and will seek opportunities to promote GAP within this network and its wider work within the European External Action Service.	As long as possible and needed. Depending on the resources and the interest in the game, realistic frame is the next couple of years with an updated version, our Introduction to Cultural Awareness online course has been up and running since 2012 so the perspectives are good.
Networking and Business Collaboration Opportunities	The Kennedy Institute is a member of steering committee of the Academic Think Tank of the OSCE (Organization for Security and Co-operation in Europe). GAP will be promoted through this medium. The Kennedy Institute will promote GAP through the ESDC on <ul style="list-style-type: none"> - Orientation Programmes - Pre-deployment Training - Mediation, Negotiation and Dialogue Training - Counter Corruption and Building Integrity - Conflict Analysis which are all conducted in the Institute.	As relevant
Other	-GAP will be described in an Institute blog	As long as possible



	<p>posting available from the Kennedy Institute website</p> <p>- In the future the Kennedy Institute will present this research to academic and civilian audiences using a conceptual framework, that the IECEU project (2015-2018) defined for CSDP crisis management operations as six core capabilities to measure effectiveness.</p> <p>The following six core capabilities have been identified and used to research the crisis management operations:</p> <ul style="list-style-type: none"> * Planning * Organisational * Interoperability * Competences * Comprehensiveness * Technology <p>The GAP project can make contributions to development of the interoperability capability in its current configuration, and potentially, in the future in all six core capabilities</p>	<p>and needed. Depending on the resources and the interest in the game, realistic frame is the next couple of years with an updated version, our Introduction to Cultural Awareness online course has been up and running since 2012 so the perspectives are good.</p>
--	--	--

Table 7 FAC Exploitation Plan

Activity	Brief Description of Activity	Timescale
Exploitation	<p>FAC will continue to promote the GAP project outputs to its wide network of contacts in the commercial and e-learning and security spheres. The results may be interesting to our wider client base such as public service, financial services, healthcare facilities etc. FAC plans to use the results, the game in particular to promote our work in the field of serious gaming and online accreditation to a wider group of stakeholders and to encourage their uptake of GAP outputs.</p>	From the end of project



Partnerships	FAC has forged very successful working relationships with all GAP partners which have led to new work opportunities. For example, by working with Upskill, ADAPT and Haunted Planet, FAC has strengthened its relationship with SMEs with gaming and e-learning expertise, and has place the company in a better position to pursue other opportunities with these SMEs on further research options as well as non-research-based projects they lead in Ireland and the UK.	From end of project
Networking and Business Collaboration Opportunities	The positive relationship FAC has enjoyed in working with academic partners on the GAP project has led to networking and further research collaboration opportunities including the potential for FAC to provide supporting services to the preparation of future EU proposals. The network of defence and police end users in GAP has also greatly enriched our network for potential stakeholders and/or partners in our reliance and urban security research projects.	Ongoing

5.3 IT, Software and Game Development

- Haunted Planet Studios
- ADAPT (See TCD above)
- Upskill



The IT, Software and Game Development Perspective

Key partners in the exploitation process are these customers as well as consortium members who could adapt the software to include local languages, further exploit the authenticity element of the game and generate spin off innovations from the digital accreditation aspect of the game.

Personal contact by the organisation's business developers as well as presentations at professional conferences would be the routes by which the product will be exploited.

Revenue streams would be once off for the purchase and ongoing for maintenance and updates.

Revenue streams would be ongoing as the service would need to be retained and maintained to be effective for the customer.

Table 8 Haunted Planet Studios Exploitation Plan

Activity	Brief Description of Activity	Timescale
Exploitation	Production of (a) a general release version of the GAP game that is not intended for soft skills learning; and (b) development of other games for learning in peacekeeping and other domains.	(a): April-December 2019 (b): April 2019 onwards
Partnerships	Potential to work with existing GAP partners (e.g., Upskill and Enquiry and FAC) as well as newly formed ones (e.g., TCD spin-out) in particular in relation to item (b) above.	April 2019 onwards
Networking and Business Collaboration	Leverage existing networks in relation to corporate and	April 2019



Opportunities	institutional training. Raise awareness of the use of Serious Games for training in the game industry. Continue to work with GAP project partners to maximise impact of the GAP results.	onwards
Other		

Table 8 Upskill Exploitation Plan

Activity	Brief Description of Activity	Timescale
Exploitation	Website page promoting and linking to the final offer which is accessed by an international network/ blog post/ continued promotion using available leaflets at relevant meetings.	Year 1 – first six months
Partnerships	Potential to work with Credily and/or DigitalMe to explore digital credential as have existing contacts within both organisations to develop digital badge for full GAP curricula and any further developed programmes. Promote the services of Haunted Planet to other learning content developers looking for digital expertise and capacity. Maintain communication with the GAP partners to share feedback on resources.	April 2019 onwards
Networking and Business Collaboration Opportunities	When working with military and justice contacts can promote the programme. Continue to promote the programme with our USA and	April 2019 onwards



	Canada networks including HEIs, employers, training providers, and government agencies such as Department of Labor inviting key GAP partners when possible. Potential collaborations with NUIM and Laurea on future projects.	
--	---	--

6. IPR and Commercialisation

Overall impact assessment for the project aims to answer the following questions:

- To what extent did the gaps in soft skills (i.e. collaboration/effective cross-cultural communication) affect the work or responding communities in the aftermath of a crisis?
- Has the GAP project addressed the problem?
- How has the GAP project succeeded in closing the soft skills gaps?
- Is there further work to be done to improve the synergy between peacekeeping groups?

The feedback from all the consortium members was vital in assessing how effective the project was and the overall impact on each of the community groups and on the partners themselves.

At this point in the project the testing that has been carried out and discussions within the consortium have informed the direction that the exploitation strategy should take. Two aspects of the overall exploitation strategy will be the basis for the ongoing discussions between consortium member about the strategy for year one:



- **Industry differentiation** – how each of the groups can maximise potential based on their own industry and areas of expertise.
- **National adaptation** – how the game could be utilised in different countries in Europe and ultimately which markets and peacekeeping methods would suit its capabilities best.

As the partners will ultimately be taking responsibility for the documentation and implementation of their own strategies, there is still scope for further development and possibilities to open before the final review is conducted by the Commission.

Commercial and IPR considerations

Discussion across the GAP project including operational project partners has developed an initial proposal with focus upon the first year:

- that the GAP resources developed and paid for by the European Commission remain free at the point of use (for a version of tools as at February 2019)
- That hosting and access to the resources be supported for 1-year (initial support provided by TCD and other partners as discussed under “Hosting” below)
- That commercially the opportunity is for consultancy/support in the use of the tools
- The exploitation strategy details the gaps in the current provision for future development
- That going forwards, dialogue is continued with sister projects to benefit from developments across Peacekeeping tools

Input was gathered from the consortium partners against a range of key questions, designed to identify the business development insights, common areas of interest, realistic opportunities for shared GAP IPR and specific claims on GAP related IPR.



From discussions with our project partners, based on the GAP results, commercial considerations have to be made with reference to several key points. Where possible we will try to ensure we are able to offer a solution to these concerns within the project, and where possible incorporate the solution into our outputs. If a solution is not possible or out of scope, we will progress these options as part of this Exploitation Strategy.

Hosting, Maintenance and updates of the system

It has been agreed that the individual platforms will continue to be hosted by the GAP partners for a period of one year. This will be funded by a social enterprise established for this purpose. It has been agreed that the GAP partners will endeavour to maintain and update the system for the next year to enable the system to develop from TRL6 to a TRL9 sustainable commercial product. Subject to budgetary constraints, each of the key partners for the system hosting will also take a lead on system maintenance and update based on discussions and feedback from the wider GAP project partners. A series of regular meetings to discuss system requirements and feedback will be set up as part of the formal project closure. However, it should be noted that the work that the partners can contribute after the end of the project will be subject to budgetary constraints.

IPR

The Consortium Agreement

From before the project, the Desca was set to do the following:

1. ensure the ownership (and licensing control) of IP created in the project rest with the creator(s)
2. provide royalty free access to listed background IP for the execution of the project
3. provide access on fair and reasonable terms to listed background IP for the exploitation of foreground IP created in the project.
4. not conflict with the ambition to spinout at a later date.

In the DESCA,

Clause 8.0 provides that the results are owned by the party generating them.

Clause 9.1.1 provides for the listing of BIP from each partner in attachment 1. Attachment 1 provides control over what is introduced and the T&Cs for its specific use, i.e. each party can specify in attachment 1 that access for commercial exploitation after the project is subject to a separate licence agreement.

Clause 9.3 provides for royalty free access for project execution.

Clause 9.4 provides for listed background access on Fair and Reasonable terms for foreground exploitation.

The DESCA Consortium Agreement (CA) does allow for partners to get access to what they need from other partners to partake in the project. Post project there is provision for partners to get access to other partners IP only if needed to commercialise their results. If the introduced BIP is clearly identified by all partners and any appropriate T&Cs for its use are identified then that gives us the following two things at the end of the project:

- 1) A list of the BIP, T&C of use, and its owner before the project starts
- 2) A reference point that gives a clear picture of what IP (FIP, Results) has been developed during the project and by whom.

Key points from the DESCA are as follows:

All partners have non-exclusive royalty free access rights to *Results* for internal research. [CA 9.4.1, p17]

All partners have access rights to *Results* (object code, or source code if Needed) for commercial exploitation which shall be granted under fair and reasonable terms. [CA 9.4.1, p17] i.e. fee bearing licence.

All partners have access rights to HPS BIP (object code only [unless otherwise agreed] and which has not been restricted by NDRC licensing). [CA 9.4.2, p17; GA 25.3]



So, all partners could enter into a bilateral agreement OR request in writing a licence from Haunted Planet of the foreground *Results* and *non-severable background Haunted Planet IP* for commercial exploitation showing that it was Needed for commercial exploitation by their company/institution.

If the *Results* contain TCD IP then the same onus is placed on Haunted Planet to request licence (fee bearing) to TCD foreground (and background) so they can exploit their own results.

The above examples focus on TCD and HPS, working on the assumption that they are the main partners in leading commercial spinouts.

Grant Agreement

Some of the project results are individually generated and others jointly so. For example, as per the Grant Agreement, Description of Action, WP4, Tasks 4.1, 4.3 and 4.4 are led by HPS with contribution by TCD Social Science.

In WP5, the in-game assessment was led by TCD ADAPT, with cooperation from TCD Sociology. The Out-Game Assessment was developed by TCD Sociology, with cooperation from Enquiryra.

TCD IP includes the concept and methodology of GAP, the research methodology to produce the interviews which are the inspiration of the content of the game (the storylines, themes, the characters); the assessment, both in-game and out-game and the Trainers Manual which also has contributions from HPS, Enquiryra and Upskill). In terms of delivering the game to ESDC after the project, the following is relevant:

In the Grant Agreement, Article 2.1 p15 it says "At month 18, Version 1 of the software will be delivered to ESDC and will be trialled with selected personnel. Version 2 will be delivered to ESDC at the end of GAP". As there is no mention of deliverables in the CA, the Grant Agreement is the only document that can be referred to with regard to deliverables.



The GAP partners have agreed that the intellectual property rights (IPR) of the outputs from the project will be governed by the Consortium Agreement's section 8 and 9, which states that results are owned by the party that generates them and provides for the possibility of IPR that is jointly owned by multiple partners.

This IPR agreement relates to the GAP Resources developed as part of the GAP project between 2016 and 2019. It does not relate to any additional developments undertaken by project partners outside of these tools.

It was agreed that as the GAP tools and resources were developed and paid for by the EU Commission that in conformance with clause 31.5 of the Grant Agreement, the tools and resources should be made available on a royalty-free basis to EU institutions, bodies, offices and agencies as well as EU Member States' national authorities for developing, implementing or monitoring their policies or programmes. While consideration was given to the commercial exploitation of the GAP tools, the consortium does not consider it appropriate to apply a direct monetary charge for the use of the tools to these bodies for the stated purpose, as imposing a cost would discourage wider use of the tools. In relation to these bodies, the commercial model is therefore that the tools will be free at the point of use and that project partners will charge consultancy and maintenance fees for the support and wider dissemination of the resources and tools for peacekeeping principles in an organisation. In relation to bodies not covered by clause 31.5 of the grant agreement, the partners are not bound by commitment to provide the tools and resources on a royalty-free basis.

Consultancy

Several partners have identified consultancy to be a commercial offering which could sit alongside the project outputs to support and enhance the project deliverables. Consultancy will look to incorporate the use of the tools within an organisation and build upon the results from the tools to develop a greater soft skills capacity within the organisation. It is this wider general peacekeeping work that will form the bulk of the consultancy work. This consultancy work will



help to maximise on the utilisation of these tools with the aim of strengthening and extending the work of the current project.

Common areas of additional support discussed with partners have included, advice and guidance regarding the GAP tools and support for workshops and guided discussions regarding peacekeeping. It is also proposed to use the GAP Trainers Manual/Handbook as a key element to this and take organisations through the framework to assist them in their peacekeeping discussions. In addition, the GAP resources can be part of a wider organisational development consultancy programme that will integrate peacekeeping into a wider development strategy.

Where required project partners (or organisations met through the Horizon 2020 project) would be brought in to help assist with this work as required. Partners hope that through consultancy not only would they gain more widespread knowledge, but also higher levels of utilisation. The essential knowledge from the real-life instances will help to develop the tools further and ultimately, help to raise the TRL from TRL5 to TRL9.

The current utilisation of the GAP tools have been across military and police stakeholders. Some partner organisations have commented in discussion that this could also lead to the products being applied to different sectors and markets. e.g. schools and higher education institutes, foreign affairs government personal, and Technology and Financial Services Centres.

Linking IPR to this Consultancy Plan

According to Article 31.5 of the GA, the results of the project are to be made available to relevant organizations on request, which means they are usable, keeping them ‘live’ on servers, with supporting administration.

This is a service and needs to be funded.

The most feasible route for GAP appears to be a **Designated Activity Company or DAC**.¹⁸ This is a new form of simple governance for profits or non-profits that generates trade and income through investors who are willing to invest in activities that generate social impact. Investors can be

¹⁸ <https://www.irishformations.ie/designated-activity-company-dac/> (accessed February 2019).



individuals, organizations or institutional investors, so includes members of the ESDC, the ESDC itself, UN bodies, etc.

GAP fits and can expand this model because:

1. It is a project that has generated research, software and learning materials
2. Stakeholders are willing to use it and in doing so demonstrate the social impact
 - a) that it works – the scores of individual police officers in the PSNI, for example, are increasing, producing a more inclusive force and working environment.
 - b) because it is downloadable and deliverable locally, it ensures all personnel are universally trained to the same standard thus improving interoperability in missions.
 - c) it democratizes training – the budget of the organization is not a barrier
3. Social investors recognize the above and will invest.

This also has the potential to expand in terms of research, software and learning materials.

Bearing in mind also that this approach delivers GAP widely and simultaneously acts as a shop window for commercialization possibilities in (2).

DAC, IP and Commercialization

This is concerned with exploitation beyond the immediate results of GAP, i.e. future iterations of GAP, customized curriculum, game and assessment for a wide variety of end user organizations across different sectors.

Although there are partners with discrete competencies and tasks delineated in GAP, there are also significant and key areas of the project that generated joint IP (going well beyond advising), and in fact this is what has made GAP possible and innovative.



The need for continued collaboration is on the one hand encouraged by the fact that the main results of GAP are jointly generated IP but on the other hand it also means that partners are free to exploit that jointly generated IP as they need. Or both.

To meet the needs of the organizations that have identified themselves as potential users of this model of training in future versions of GAP, the joint partnership approach is the best way to go.

Here are the options:

1. a single legal entity comprising several or all of the GAP partners or
2. single spin-outs in joint partnership (though to simplify things a little bit, TCD Sociology and ADAPT will be a single entity for either scenario)
3. or both? A single entity would be very unwieldy and difficult to incorporate as a company/enterprise. But not impossible. The joint partnership approach makes more sense, but it would be more of a multiple partnership.

The goal is to retain the core elements but in a flexible structure, and to have an agreement around this in place as soon as possible given the imminent end of the project.

Training and Education

The GAP game is the core of a service that can be provided by experts within the ESDC. The ESDC has over 35 Training courses tentatively arranged for 2019 and including the training for trainer's programme has over 90 offerings. Of these courses, GAP may be applicable to the following:

Fig. 11: 2018 ESDC Courses with potential GAP applicability

Pre-Deployment Training (PDT) for CSDP missions

CSDP Reflection Seminar

Common Module on CSDP

International Conference "E-Learning and software for education"

CSDP Mediation, Negotiation and Dialogue Skills for CSDP



A Comprehensive Approach to Gender in Operations

Integration of a Gender Perspective in CSDP

Train the Trainers

Fig.12: Preliminary 2019 ESDC Courses with potential GAP applicability

Improving Performance in the CSDP Missions

Pre-Deployment Training Course 2

Common Module on CSDP (based on ESDC Orientation Course curriculum)

Comprehensive Approach to Gender in Operations

Mediation, Negotiation and Dialogue Skills for CSDP

In addition to the above run courses and projected courses, GAP is potentially applicable to the following areas of the standard ESDC curricula: Cross-Cultural Competence (3C) for CSDP missions and operations, EU Police Command and Planning. ESDC run a professional-orientated course such as Protection of Civilians in Armed Conflicts. This course is optimised for professionals who are concerned with peacekeeping and the reduction of risk, promotion of human factors, and improvement in quality, including peacekeeping operationalisation. The candidates who take this course are guided through the lifecycle of peacekeeping thus this course is therefore one of the means by which Peacekeeping in general, but also the roll-out of the GAP tools can be optimised.



Figure 13: Screenshot of ESDC News page, highlighting course and involvement in GAP Conference in January 2019



GDPR

Following the launch of the GAP resources, stakeholders will be able to request access to the game. It is important that the project considers the impact of the new General Data Protection Regulation (GDPR), which details how personal data is to be used and stored. This was not part of the original project plan as GDPR is a new development. The GAP project will need to detail on the site how the data is used and stored. The GAP tools ask for minimal personal data so a



statement of GDPR usage should suffice but will need to be looked at in detail prior to the launch of the project to a wider European audience.

Confidentiality and data storage

Following the development of the GAP results and discussions with Peacekeeping and soft skills training customers Partners, the issue of data security and data confidentiality was raised. It was accepted that the GAP resources are based on modern secure code and hosted in a secure environment, there was a realisation that the data entered into the Gap Game for the peacekeeping calculations was commercially sensitive to peacekeeping organisations. It was agreed that the current open access platform was a good place for staff to learn about peacekeeping and a tour of the tools would give a good understanding of the issues, it was felt that Peacekeeping organisations would not easily adopt a cloud-based tool and input sensitive commercial data onto the website. Concerns were raised about possible data security and the risk of other competitor organisations being able to see the data.

Downloadable Game

The proposed solution is to allow organisations the option to download the Game onto a local network or server and enter the details within the organisation's secure environment. This solution allows organisations to enter confidential data in a secure local environment and still allows the integrated set of GAP resources that are web-based to be used for training and improving peacekeeping awareness amongst organisations.

Legal disclaimers

As part of the commercial discussions following the trials, it was agreed that prior to the launch a set of commercial statements and licences should be developed and signed up to by users as part of the SSO process. It was agreed that a "no cost" licence be developed that set out the use of the GAP resources and granting access to individuals and organisations covered under clause 31.5 of



the Grant Agreement to use the tools to develop their peacekeeping and soft skills training. In accordance with clause 31.5, the licence would grant free use by individuals and CI Organisations within Europe but not use by individuals or organisations for commercial gain (i.e. for organisations training in peacekeeping). The agreement will also contain statements on the fact that the tools and resources are for guidance, analysis and training and will prompt discussion within organisations regarding the organisation's preparedness for a Peacekeeping mission. The EU Commission or the GAP project was not responsible for any decisions made by the Peacekeeping Organisation based on these tools.

7. Conclusion

Commercialisation Funds

This paper has set out the options for developing a minimum viable product (MVP) for the GAP project tools. One option is to look at options for further funding to develop the commercial MVP. There are a range of options that the project team are exploring at the current time.

The GAP project is part of a wider network of projects developing resources to improve peacekeeping across the EU. These group of projects have developed a wide range of research, practical tools and evidence-based solutions with practical pilot studies. A white paper is in development that outlines the output of the peacekeeping work and the options for future development, a roadmap for integration and the opportunities for further research. There is a key opportunity to bring this learning together to an integrated peacekeeping solution that is of practical benefit to the whole of the EU.

Each of the partners are exploring options for further funding within their own countries. For example, organisations based in Ireland can submit bids to Enterprise Ireland and UK based organisations have access to national and regional development funds. Using these routes, it may be possible to gain further funding to move the outputs to the MVP stage.



The consortium are actively engaging with Public Sector and Local Government organisations to develop a European-based set of GAP resources. It is hoped that by setting up a project with Local Government, an MVP version for the ROI can be developed to support peacekeeping across local communities and associated Peacekeeping Organisations.

Next steps

The GAP project has delivered an integrated suite of resources that offer a unique solution in the marketplace. Currently, it is the only solution to offer evidence-based guidance, a set of assessment tools and integrated learning resources.

These resources have been tested by Peacekeeping Operators and improved by the feedback received from partners. We have a detailed set of actions to take the output of the project to MVP status.

The GAP project has a hosting solution in place for the GAP Game. This will allow continued access to the tools by partner organisations and a wider network of Peacekeeping Operations. The GAP website will continue to promote and link Peacekeeping Operators to the GAP resources.

We are in contact with the wider group of projects and will continue to engage across the Secure Societies programme to ensure that any further integration work is included in the GAP resources.

Each of the partner organisations has given an indication of their exploitation of these resources and the adoption of the tools will give more feedback and more evidence of the benefit of an integrated suite of resources in the coming months.

As outlined above the GAP partners are continuing to promote the use of the GAP Tools and actively engaging in networks to support the commercialisation of the GAP products.



References

Barquet, Ana Paula B., et al. "Business model elements for product-service system." Functional Thinking for Value Creation. Springer Berlin Heidelberg, 2011. 332-337: They stated that "The Canvas business model was applied and tested in many organizations (eg IBM and Ericsson), being successfully used to easily describe and manipulate business models to create new strategic alternatives."

De Reuver, Mark, Harry Bouwman, and Timber Haaker. "Business model roadmapping: A practical approach to come from an existing to a desired business model." International Journal of Innovation Management 17.01 (2013): They describe the business model canvas as the "Most prominent.. popular tool that makes it simple for practitioners to design business models in a creative session."

Digital Certificates Project, <http://certificates.media.mit.edu/> (accessed 040119)

Gaming for Peace Website - <https://gap-project.eu/>

International Labour Office, 2018.

Osterwalder, A (2004). The Business Model Ontology - A Proposition in A Design Science Approach. PhD thesis University of Lausanne.

Osterwalder, A, Yves Pigneur, Alan Smith, and 470 practitioners from 45 countries (2010), "Business Model Generation"

Sagias, Ioannis 'Dissemination and Exploitation of Research and Innovation project results' presented at H2020 Coordinators Day, 22 Feb 2018: http://ec.europa.eu/research/participants/data/ref/h2020/other/events/2018-02-22/9_dissemination-exploitation_en.pdf

UNISDR (2012) How to Make Cities More Resilient - A Handbook for Mayors and Local Government Leaders. United Nations International Strategy for Disaster Reduction, Geneva.



Project Number: 700670
Project Acronym: GAP
D7.6 Final Conference Report

UN (Department of Peacekeeping Operations/Department of Field Support Integrated Training Service) a Practical Guide to Peacekeeping training Evaluation (2015):
<http://repository.un.org/bitstream/handle/11176/90560/Practical%20Guide%20to%20Peacekeeping%20Training%20Evaluation.pdf?sequence=1&isAllowed=y>

Wikipedia (2018) – Business Model Canvas https://en.wikipedia.org/wiki/Business_Model_Canvas

