Supplementary Material

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Survey Answers

Newfoundland Event

A note about the participant code: the first two letters of the player's mother's maiden name, followed by the day she was born, e.g. MA12 if your mother's last name is Matthews and she was born 12th May 1975

Participant Information (Pre-Game Survey)

Participant Code	PO13	PE24	SA01	LU27	LY16	FO27	BE30	CA16	MC17	CO06	WA21	HA21
Gender	Male	Female	Male	Female	Female	Female	Female	Female	Male	Male	Male	Male
Age category	25-35	25-35	35-45	35-45	25-35	25-35	18-25	18-25	25-35	45-55	35-45	25-35
Country of Residence	Canada	Canada	Canada	Canada	Canada	Canada	Canada	Canada	Canada	Canada	Canada	Canada
Country of Origin	Faroe Islands	Canada	Pakistan	Canada	Canada	Canada	Canada	Scotland	Canada	Canada	Canada	Canada
Professional Sector	Non-profit	Non-profit	Non-profit	Public	Public sector	Non-profit	Non-profit	Non-profit	Private	Public	Non-profit	Non-profit
Categories that best describe your most recent professional occupation (max. of 2 answers)	Scientific advisor; Socio- economic advisor	Researche r; Engineer	Researche r Teacher/ lecturer	Policy maker; Resource manager	Policy maker; Planner	Scientific advisor	None	None	Consultan t Engineer	Teacher/ lecturer	Teacher/ lecturer	None
Years of professional work experience in the field of marine spatial planning	5	0	0	5	10	0	0	0	0	13	2	0

Participant Code	PO13	PE24	SA01	LU27	LY16	FO27	BE30	CA16	MC17	CO06	WA21	HA21
Knowledge	I have	I have	I have	I have	I have	I have	I have	I have	I have	I have	I have	I have
about marine	working	minimal,	minimal,	good	good	depth of	minimal,	minimal,	minimal,	depth of	good	minimal,
spatial planning	knowledg	or	or	working/	working/	understan	or	or	or	understan	working/	or
	e of key	textbook	textbook	backgroun	backgroun	ding of	textbook	textbook	textbook	ding of	backgroun	textbook
	aspects of	knowledg	knowledg	d	d	this	knowledg	knowledg	knowledg	this	d	knowledg
	this area	e without	e without	knowledg	knowledg	discipline	e without	e without	e without	discipline	knowledg	e without
	of practice	connectin	connectin	e of this	e of this	and area	connectin	connectin	connectin	and area	e of this	connectin
		g it to	g it to	area of	area of	of practice	g it to	g it to	g it to	of practice	area of	g it to
		practice	practice	practice	practice		practice	practice	practice		practice	practice
Professional	I have	I am not,	I am not,	I am	I have	I am not,	I am not,	I am	I am not,	I have	I am not,	I am not,
involvement in	quite	or hardly	or hardly	involved	quite	or hardly	or hardly	involved	or hardly	strong	or hardly	or hardly
actual marine	some	involved	involved	in a few	some	involved	involved	in a few	involved	involveme	involved	involved
spatial planning	involveme	at all	at all	issues	involveme	at all	at all	issues	at all	nt in a	at all	at all
processes	nt in a few			from time	nt in a few			from time		number of		
	important			to time	important			to time		important		
	issues.				issues.					issues		

During the Game Survey

Question	Purple	Indigo	Yellow	Orange	Red
What challenges is this game presenting you as a team?	Time constraint. Use of software, coordination	Time management, consultation within the team and with others, technological (stuff isn't working)	tech difficulties; time it takes to see minister. Tutorial on plan; software navigation. Time passes even when we can't do anything.	Software and knowledge of the area and baseline data, and who to speak with/sector representatives	Figuring out how to use the technology and understanding the needs of each layer (ex, no parameters for where optimal wind farm locations). So few players and everyone having multiple roles makes for difficulty keeping everything straight.
What strategies are you going to use as a team to develop a coherent marine spatial plan	Delegation, cooperation	Planning cycles, working with what we have	Whatever works,	We looked at everything as a team, looked at what is missing, what needs more information, to make sure to talk with key partners to avoid conflict	Lots of communication

Question	Purple	Indigo	Yellow	Orange	Red
On a scale of 1 (terrible) to 5 (brilliantly) how well are your team's strategies working?	3	4	3	4	4
What is working well about your team's strategies and why?	Dividing tasks allows more efficient use of time, allows cooperation among countries	Working well because we set realistic achievable goals	Not much	We are still having fun and working together easily, we have each chosen some key roles	All working together and dealing with the issues together
What is not working about your team's strategies and why?	Difficulty collaborating due to time and splitting up of plans within country planning	Understanding some of the goals (for example, what does 6,000MW wind really mean in total). How to geographically spread out some of the new facilities	A lot of confusion over how to prioritize things	We started off without personal roles	Initially we weren't really discussing with other groups
How can you adapt your team's strategies moving forwards?		Use a more integrated approach, keep in mind fishing as the G.O.D. requested.	Focus on communication between teams and between different ministers	Taking on specific roles and starting to talk with other countries and representatives, mapping	More consultation with other countries
What has worked well about your team's refined strategies and why?	Similar sectors joined together (energy and shipping, ecology and fisheries)	Leaving on most important layers (things that can't be moved) to plan our work, address public disagreement	Wind/Aqua Committee, Cable Hub, Fishing Sector, Increased Protected Areas	Specific roles and responsibilities, national/international collaboration, taking initiative, constantly consulting with our own team and other countries	
What did not work about your team's refined strategies and why?	Limitations from rec areas. Prevented from combining things	We had not initially accounted for buffer zones and pipelines.	Server issues, wind electricity went down.	Not sufficient time to develop a full MSP plan	

Information About the Game (Post-Game Survey)

Scale:

- 1 Strongly disagree 2 Disagree 3 Neutral

- 4 Agree 5 Strongly Agree

	Questions	SA01	LU27	HA21	RO06	-	LY1952	BE30	PE24	CA16	Mean	Standard Deviation
1	Style attributes used on the computer screens are attractive and suitably designed.	4	4	4	5	4	4	4	5	4	4.2	0.44
2	The digital (mapping) materials in the game were understandable.	5	4	3	3	3	3	4	4	4	3.7	0.71
3	Navigation through the user screens (interfaces) was logical and easy to use.	3	4	4	4	2	3	4	3	3	3.3	0.71
4	The user screens (interfaces) in the game gave enough of a sense of the changes in the process.	3	4	4	3	3	3	2	2	4	3.1	0.78
5	During the game there were few or no computer malfunctions.	5	2	1	3	2	2	2	2	2	2.3	1.12
6	When there were computer malfunctions, these were quickly and satisfactorily remedied.	4	4	4	4	2	4	2	2	3	3.2	0.97
7	The discussions between the players were good	5	4	4	5	4	4	4	4	4	4.2	0.44

	Questions	SA01	LU27	HA21	RO06	-	LY1952	BE30	PE24	CA16	Mean	Standard Deviation
8	As players, we worked together well during the game	5	3	4	5	5	4	4	4	4	4.2	0.67
9	As players, we did enough internal reflection and adjustment	4	3	3	4	3	4	4	4	4	3.7	0.50
10	In general, other players (team members) played their roles well.	3	4	4	5	4	4	4	4	4	4.0	0.50
11	I felt that my teammates valued my inputs *	4	4	4	5	4	4	4	5	4	4.2	0.44
12	I really put myself into my role.	4	4	4	5	4	4	3	4	4	4.0	0.50
13	The game materials were understandable and clearly written.	2	4	4	4	4	4	2	3	5	3.6	1.01
14	The simulation game was well-led by the instructor(s).	5	3	4	5	4	4	2	4	5	4.0	1.00
15	The instructions and explanations at the start of the simulation game were clear.		3	4	4	3	4	2	2	5	3.4	1.06
16	The tasks in the simulation game were understandable and clearly described.	4	4	4	4	3	4	2	3	5	3.7	0.87
17	The rules of the game were clear and straightforward.	5	4	4	4	4	3	2	4	5	3.9	0.93
18	Given the aims of the game, the simulation was sufficiently detailed.	4	4	4	4	4	4	3	5	4	4.0	0.50

	Questions	SA01	LU27	HA21	RO06	-	LY1952	BE30	PE24	CA16	Mean	Standard Deviation
19	Given the aims of the game, the simulation was sufficient realistic.	5	4	4	4	5	4	3	5	4	4.2	0.67
20	The issues in the game represent the challenges in MSP accordingly.	5	4	4	4	5	4	4	4	5	4.3	0.50
21	I gained more insight into what the important factors in MSP are and how they (can) influence each other.	5	4	4	5	5	4	4	5	4	4.4	0.53
22	I gained more insight into conflicts and co-operation between different sectors (e.g. fisheries, energy, environment).	5	4	4	5	5	4	4	5	4	4.4	0.53
23	I have a clearer picture on how MSP can be turned into an integrated process.	4	4	4	5	5	4	4	5	4	4.3	0.50
24	I gained more insight into how MSP decisions in different countries (can) influence each other.	4	4	4	5	5	4	4	4	4	4.2	0.44
25	I gained more insights in the problems and barriers of co- operation among countries in MSP.	2	4	4	5	5	4	4	5	4	4.1	0.93
26	I gained more insights in the various ways countries can co- operate in MSP.	4	4	4	5	5	4	4	5	4	4.3	0.50

	Questions	SA01	LU27	HA21	RO06	-	LY1952	BE30	PE24	CA16	Mean	Standard
												Deviation
27	I gained more insight into how decisions on different planning scales (local, regional, national, international) (can) influence each other.	4	4	4	5	3	4	4	4	3	3.9	0.60

* Question 11 was only asked during the Newfoundland event.

Information About their Experience (Post-Game Survey)

Participant Code	What did you like about the MSP Challenge 2050	What didn't you like about the MSP Challenge 2050	What would you like to improve about the MSP Challenge 2050	How would you improve the game simulation so that players learn more?
SA01	A quite impressive, effective, and easy approach of complex system management	Graphs of software. They didn't give a clear picture	Projects implementation and existing potential should be in table form	By improving data analysis and graphs
LU27	provided real life example of MSP issues	it felt hectic and often hard to appreciate all the game details due to time limits		
HA21	It was nice to be working with different people from different industries and backgrounds. I also liked the fact that it gave us a small insight into the what and how of the MSP process. Even if it was a hypothetical situation.	It was a little stressful at times, especially when the Minister regularly added new issues to the table that we had to consider. Considering the time constraint, it was difficult at times to take everything in and try to do everything as well. The cameras were a little much as well.	Maybe a short tutorial at the beginning to understand how the software works, because it took a little while to figure out how to work everything.	Maybe increase the number of players per team so that each sector is fairly represented. We had to set aside some planner roles because of the lack of people and therefore we did not focus on those aspects.
-	Real life setting	Short timeframe	A fraction more consistency from Minister (GOD)	Better instructions (small tutorial at the beginning)
LY1952	Interactive	would have liked some more explanation of the game and what the final result was supposed to be	Showing results of the countries	follow up on the results. what we could have done to improve and meet our objectives

Participant Code	What did you like about the MSP Challenge 2050	What didn't you like about the MSP Challenge 2050	What would you like to improve about the MSP Challenge 2050	How would you improve the game simulation so that players learn more?
PE24	The graphics were good, it was good to be able to see what other teams were doing in real time.	Navigating the different layers and editing things were difficult. It was also difficult to see when things were built and there was no record of all that was done in the past (at least none that we found to consult). The graphs with statistics were interesting but it was hard to understand how our actions were affecting some of the data presented on them.	I would make it more user friendly and for some of the icons to be larger so you can get more of a sense of where certain things are without spending 5min looking for them. For example, when there was consultation from other countries to build something, we would turn on the layer and literally spend 3min trying to find the new structure they were putting in place.	I would like for the organizers to spend a few minutes at the beginning explaining how to play the game - in terms of buttons, creating, editing it would have avoided confusion and asking many questions to the game organizers during the first few hours we played.
CA16	It was very interesting, the computer game element was great.	The crashing of computers was an issue.	There was some confussion about trying to place activities in certain areas and not being alerted to their unsuitability for that location. It was also slightly confusing to try and correct these issues once a decision had been made.	More time with the game. I think the fact that we only had roughly one day on the game may have caused us to rush through it. I would've enjoyed spending more time on it.

Copenhagen Event

Participant Information (Pre-Game Survey)

Scales:

Knowledge of MSP

- 1 I have minimal, or "textbook" knowledge without connecting it to practice
- 2 I have working knowledge of key aspects of the area of practice
- 3 I have good working and background knowledge of the area of practice
- 4 I have depth of understanding of the discipline and area of practice.
- 5 I have authoritative knowledge of the discipline and deep tacit understanding across the area of practice.

Professional Involvement:

- 1 I am not, or hardly involved at all
- 2 I am involved in a few issues from time to time
- 3 I have quite some involvement in a few important issues
- 4 I have strong involvement in a number of important issues
- 5 I am deeply involved in a great many of important issues

Participant Number	Gender	Age	Country of origin	Country of profession	Sector	Experience	Knowledge of MSP	Professional involvement
1	female	35-45	USA	Denmark	Public	less than 1 year	2	5
2	female	25-35	German	Germany	Public	less than 1 year	1	1
3	female	45-55	Denmark	Denmark	Non-profit	2-3 years	2	1
4	female	25-35	Germany	Germany	Private	2-3 years	1	1
5	female	35-45	Latvia	Latvia	Public	less than 1 year	1	1
6	male	25-35	Poland	Poland	Public	1-2 years	2	2
7	male	25-35	Denmark	Denmark	Private	less than 1 year	1	1
8	female	45-55	Poland	Poland	Public/ Non- profit	10-15 years	3	4
9	female	25-35	Germany	Germany	Public	less than 1 year	1	2
10	male	25-35	Latvia	Latvia	Public	less than 1 year	1	1
11	male	65+	Estonia	Estonia	Non-profit	5-10 years	3	4
12	female	45-55	Germany	all EU	Private	15-25 years	5	5
13	female	45-55	Germany	all EU	Private	15-25 years	5	5
14	male	35-45	Sweden	Sweden	Non-profit	2-3 years	3	3

Participant Number	Gender	Age	Country of origin	Country of profession	Sector	Experience	Knowledge of MSP	Professional involvement
15	male	45-55	Poland	Poland	Non-profit	5-10 years	2	3
16	male	25-35	Netherlands	Germany	Private	less than 1 year	2	3
17	male	35-45	Germany	Germany	Public	5-10 years	3	4
18	male	45-55	Denmark	Denmark	Public	2-3 years	3	3
19	male	25-35	Sweden	Sweden	Non-profit	2-3 years	4	4
20	male	25-35	Sweden	Sweden	Non-profit	2-3 years	4	4
21	female	55-65	Norway	Norway	Public	10-15 years	4	4
22	male	45-55	Norway	Norway	Public	10-15 years	5	5
23	male	25-35	Poland	Poland	Public	2-3 years	3	3
24	male	25-35	Greece	UK	Public	3-5 years	4 and 5	5
25	Female	25-35	German	Germany	Non-profit	1-2 years	2	1
26	male	55-65	Denmark	Denmark	Non-profit	1-2 years	3	2
27	Female	35-45	Finland	Finland	Public	1-2 years	1	1
28	male	25-35	Netherlands	Netherlands	Public	less than 1 year	1	2
29	male	55-65	Sweden	Sweden	Public	3-5 years	4	5
30	male	55-65	Sweden	Sweden	Public	3-5 years	4	5
31	male	25-35	France	Finland	Public/Non-	2-3 years	2	1
					profit			
32	male	45-55	Finland	Finland	Non-profit	1-2 years	3	1
33	male	35-45	Spanish	Finland	public	5-10 years	3	3
34	male	18-25	Pakistan	Sweden	Non-profit	2-3 years	4	5

Information About the Game (Post-Game Survey)

Scale:

- 1 Strongly disagree 2 Disagree 3 Neutral

- 4 Agree
- 5 Strongly Agree

	Question	P1	P2	P3	P4	Р5	P6	P 7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	Mean	Standard Deviation
1	Style attributes used on the computer screens are attractive and suitably designed.	4	3	4	3	4	4	4	4	4	4	4	5	5	5	4	4	5	4	4	4	4.10	0.55
2	The digital (mapping) materials in the game were understandable.	4	2	3	4	3	5	3	3	4	4	4	5	5	4	4	4	5	4	2	4	3.80	0.89
3	Navigation through the user screens (interfaces) was logical and easy to use.	3	3	3	2	3	4	2	2	3	3	3	4	5	4	3	4	4	3	3	3	3.20	0.77
4	The user screens (interfaces) in the game gave enough of a sense of the changes in the process.	2	2	4	2	3	4	3	2	4	3	3	4	5	3	3	3	4	-	3	3	3.16	0.83
5	During the game there were few or no computer malfunctions.	4	1	4	4	-	2	4	4	4	2	2	5	5	2	5	4	5	2	5	5	3.63	1.34

	Question	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	Mean	Standard Deviation
6	When there were computer malfunctions, these were quickly and satisfactorily remedied.	5	2	5	5	5	4	5	5	4	5	5	5	5	4	5	5	5	5	5	5	4.70	0.73
7	The discussions between the players were good	3	3	4	3	4	2	3	3	4	4	4	3	4	4	4	4	4	5	4	5	3.70	0.73
8	As players, we worked together well during the game	3	4	4	3	4	2	3	2	3	3	3	4	5	3	4	3	4	3	3	5	3.40	0.82
9	As players, we did enough internal reflection and adjustment	3	4	4	3	2	2	2	2	3	3	3	2	5	3	4	4	2	4	2	4	3.05	0.94
10	In general, other players (team members) played their roles well.	3	4	3	3	5	2	3	3	4	4	4	4	5	4	4	4	4	3	4	5	3.75	0.79
11	I really put myself into my role.	3	4	3	3	4	4	2	3	3	3	3	4	5	3	5	4	4	4	4	5	3.65	0.81
12	The game materials were understandable and clearly written.	4	3	3	2	3	4	4	4	3	4	4	5	5	4	4	4	5	3	5	4	3.85	0.81
13	The simulation game was well-led by the instructor(s).	4	3	5	3	4	2	4	3	4	4	4	-	5	4	4	4	5	4	4	5	3.95	0.78

	Question	P1	P2	P3	P4	Р5	P6	P 7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	Mean	Standard Deviation
14	The instructions and explanations at the start of the simulation game were clear.	4	3	4	2	3	3	2	4	4	4	4	4	5	3	4	3	4	3	3	4	3.50	0.76
15	The tasks in the simulation game were understandable and clearly described.	4	2	3	3	2	2	2	2	4	3	3	2	5	2	4	3	4	2	4	4	3.00	0.97
16	The rules of the game were clear and straightforward.	4	2	3	2	3	3	2	3	3	3	3	3	5	3	5	3	4	3	4	3	3.20	0.83
17	Given the aims of the game, the simulation was sufficiently detailed.	3	2	3	3	5	4	2	2	3	5	5	4	5	4	4	4	4	4	5	3	3.70	1.03
18	Given the aims of the game, the simulation was sufficient realistic.	4	3	3	3	3	4	2	1	3	4	4	2	5	5	4	4	3	3	5	3	3.40	1.05
19	The issues in the game represent the challenges in MSP accordingly.	3	3	4	3	2	4	3	2	4	4	4	3	5	3	4	4	3	3	3	3	3.35	0.75
20	I gained more insight into what the important factors in MSP are and how they (can) influence each other.	2	2	5	4	4	3	2	3	4	4	4	2	5	3	5	4	5	3	4	3	3.55	1.05

	Question	P1	P2	P3	P4	Р5	P6	P 7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	Mean	Standard Deviation
21	I gained more insight into conflicts and co- operation between different sectors (e.g. fisheries, energy, environment).	2	3	5	2	4	3	2	3	4	3	3	2	5	3	5	2	5	3	2	3	3.20	1.11
22	I have a clearer picture on how MSP can be turned into an integrated process.	3	3	5	3	3	3	3	2	3	4	4	2	5	3	4	2	3	2	3	3	3.15	0.88
23	I gained more insight into how MSP decisions in different countries (can) influence each other.	2	4	5	2	2	2	2	3	4	3	3	2	5	4	4	2	5	4	2	3	3.15	1.14
24	I gained more insights in the problems and barriers of co- operation among countries in MSP.	2	4	5	2	3	2	3	3	4	3	3	4	5	4	5	4	4	2	2	3	3.35	1.04
25	I gained more insights in the various ways countries can co- operate in MSP.	3	4	5	2	2	2	3	2	3	3	3	4	5	3	4	4	2	4	2	4	3.20	1.01

Question		P1	P2	P3	P4	Р5	P6	P 7	P8	Р9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	Mean	Standard Deviation
26 I gained mor insight into h decisions on different plan scales (local, regional, nat international influence eac other.	re how inning l, tional, l) (can) ch	3	5	5	3	1	3	2	2	3	3	3	2	4	2	4	2	1	2	2	3	2.75	1.12

Information About their Experience (Post-Game Survey)

Participant number	What did you like about the MSP Challenge 2050	What didn't you like about the MSP Challenge 2050	What would you like to improve about the MSP Challenge 2050
1	A good way to face concrete challenges with other MSP colleagues. To use the game as learning the MSP process.	A little too complicated for a first-timer. Too little time to make the plan in a good transboundary way	More time to play and perhaps a short explanation (technically) to read before the game/meeting or game moderator for each country group.
2	-	-	More directed to transnational questions. More goal directed towards the aims of the project
3	Interactive, comprehensive, informative. Learned more about MSP process	-	-
4	- Fun "playground". - Great educational tool	 Too much flexibility lacks a structured gameplay of specific tasks Too much focus on achieving national objectives rather than focusing on transnational issues Not sure how to preserve results 	 selection of indicators can be a task by itself introduce a table facilitator group indicators together rename "factions" to "human activities" introduce tokens (i.e. financial resources) – one cannot simply afford to construct all harbours, cables, etc.

Participant number	What did you like about the MSP Challenge 2050	What didn't you like about the MSP Challenge 2050	What would you like to improve about the MSP Challenge 2050
5	To get in contact with other people. To learn more about MSP.	Too complex for the short time. Not realistic as economic interface neglected.	Focus on transnational challenges, e.g. a real case study of a transborder area
6	Good software, good set-up, good people	Unclear objectives, unclear rules	It'd be better to read in advance the rules and your role.
7	Graphical set-up	Setting up an MSP from scratch and transnational coordination is too much	-
8	Interactions	-	Less sectors, a tutor per group.
9	UI promising. Covers a lot of aspects	No stakeholder involvement. Very easy implementation of decision	Simulate stakeholder involvement. For me normally, rendering and animations / weird tables did not add any value
10	Visualization	Complexity	Sample accordingly to more specific objectives
11	 Engaging Educational Great way to showcase MSP in "reality" 	 UI could use some work and simplification More focus on transnational issues needed 	 make UI more intuitive Simplify tasks preset polygons and just them? Cluster/group sector, for example the fish species into a fisheries group Introduce scenarios Introduce random events, for example changes in EU policy, etc.
12	I got a rich insight into the MSP processes	Too complex (technically)	Could be simplified
13	It makes you think in cross-sectoral way and shows if you fail at that	Transnational aspects were not easy to see. Technicalities of playing with mapping elements tool too much effort	Transnational aspects into the focus. Playing with alternative scenarios.
14	Quality of design and experience	More forcing interaction. Little reflection to reality of MSP	More focus – specific issue or area. Less information overload. Clearer process
15	The interface is very nice. It is learning by doing	You need more time to get into it (maybe 2 day activity)	Maybe add sector (eg. Research/education). Improve the "international/transnational" aspect.

Participant number	What did you like about the MSP Challenge 2050	What didn't you like about the MSP Challenge 2050	What would you like to improve about the MSP Challenge 2050
16	-	Did not learn anything. Waste of my time.	A lot if it should be used.
17	Great initiative. Mixing media with people collaborating is a good way to give people perspective.	Spend quite some time figuring out the purpose/goal of the exercise	Overall the idea is great, and my feedback would mostly be in the abstraction level of the game and it's mechanics, and minor details such as UI/UX flow elements, such to focus the energy in the "real life dilemmas" over the game fuzziness.

Venice Event

Participant Information (Pre-Game Survey)

	Gender	Age	What is your country of origin (principal nationality)?	In which country are you currently professionally working / studying in the area of MSP?	In which societal sector do you (mainly) practice your profession?	What is your experience in MSP?	To what extent are you knowledgeable about Marine/Maritime Spatial Planning?	To what extent do you have professionally involvement in actual MSP planning processes?
1	female	25- 35	Lebanese	Spain/ Portugal/ Italy	public	1 to 2	good working and background knowledge	not, or hardly involved
2	male	25- 35	Yemen	Italy	public	1 to 2	working knowledge	I am involved in a few issues
3	female	25- 35	Greece	Italy	public / non-profit	1 to 2	working knowledge	not, or hardly involved
4	female	25- 35	Costa Rica	Italy	private	1 to 2	working knowledge	not, or hardly involved
5	male	25 - 35	Ghana	Italy	non-profit	1 to 2	minimal, textbook knowledge	not, or hardly involved
6	female	25 - 35	Yemen	Italy	private	less than 1	good working and background knowledge	not, or hardly involved
7	male	18 - 25	Ethopia	Italy	non-profit	less than 1	working knowledge	strong involvement
8	female	25 - 35	Brasil	Italy	non-profit	1 to 2	minimal, textbook knowledge	not, or hardly involved
9	female	25 - 35	Brazil	Italy	private	1 to 2	working knowledge	I am involved in a few issues
10	female	25 - 35	Philippines	Italy	non-profit	less than 1	working knowledge	not, or hardly involved
11	female	25- 35	Italy	Italy	non-profit	1 to 2	minimal, textbook knowledge	not, or hardly involved
12	female	25- 35	Trinidad & Tobago	Italy	public	1 to 2	good working and background knowledge	I am involved in a few issues

13	male	25 - 35	Bangladesh	Italy	public	1 to 2	good working and background knowledge	strong involvement
14	male	25 - 35	Brazil	Italy	non-profit	less than 1	good working and background knowledge	strong involvement
15	male	18 - 25	USA	Italy	non-profit	1 to 2	depth of understanding	not, or hardly involved
16	male	25 - 35	Bangladesh	Italy	public / private	1 to 2	depth of understanding	quite some involvement

Information About the Game (Post-Game Survey)

Scale:

- 1 Strongly disagree2 Disagree3 Neutral

- 4 Agree 5 Strongly Agree

	Questions	P1	P2	P3	P4	Р5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	Mean	Standard Deviation
1	Style attributes used on the computer screens are attractive and suitably designed.	4	5	5	5	5	4	5	4	4	4	5	4	5	5	4	4.53	0.52
2	The digital (mapping) materials in the game were understandable.	4	5	5	5	5	5	5	3	5	5	5	4	4	5	4	4.60	0.63
3	Navigation through the user screens (interfaces) was logical and easy to use.	4	5	5	5	4	5	5	3	4	5	5	4	4	4	3	4.33	0.72

	Questions	P1	P2	P3	P4	P5	P6	P 7	P8	P9	P10	P11	P12	P13	P14	P15	Mean	Standard Deviation
4	The user screens (interfaces) in the game gave enough of a sense of the changes in the process.	3	5	4	4	4	4	4	3	4	4	4	4	5	2	3	3.80	0.77
5	During the game there were few or no computer malfunctions.	3	4	3	2	3	4	4	2	2	3	1	2	4	4	2	2.87	0.99
6	When there were computer malfunctions, these were quickly and satisfactorily remedied.	3	5	4	4	5	4	5	4	5	4	4	5	5	5	2	4.27	0.88
7	The discussions between the players were good	4	5	5	5	4	5	5	4	5	4	5	4	4	5	4	4.53	0.52
8	As players, we worked together well during the game	4	5	5	4	4	5	4	4	5	4	5	4	4	5	4	4.40	0.51
9	As players, we did enough internal reflection and adjustment	3	3	5	4	5	5	4	4	4	4	5	4	5	5	3	4.20	0.77
10	In general, other players (team members) played their roles well.	4	4	5	4	5	5	4	4	5	4	5	4	4	5	2	4.27	0.80
11	I really put myself into my role.	4	5	5	5	4	5	4	4	5	5	4	4	5	5	4	4.53	0.52
12	The game materials were understandable and clearly written.	3	5	4	5	5	3	5	4	5	5	5	4	5	5	4	4.47	0.74
13	The simulation game was well-led by the instructor(s).	4	5	4	5	5	4	5	4	5	5	5	4	5	5	4	4.60	0.51

	Questions	P1	P2	P3	P4	P5	P6	P 7	P8	P9	P10	P11	P12	P13	P14	P15	Mean	Standard Deviation
14	The instructions and explanations at the start of the simulation game were clear.	4	5	5	4	5	3	5	4	5	5	5	4	5	5	4	4.53	0.64
15	The tasks in the simulation game were understandable and clearly described.	4	5	5	5	5	4	5	4	5	5	5	4	5	5	4	4.67	0.49
16	The rules of the game were clear and straightforward.	4	4	5	5	5	4	5	3	5	5	5	4	4	5	3	4.40	0.74
17	Given the aims of the game, the simulation was sufficiently detailed.	4	4	5	5	5	3	4	2	5	4	5	4	5	5	4	4.27	0.88
18	Given the aims of the game, the simulation was sufficient realistic.	4	4	5	5	5	3	5	2	5	5	5	4	4	4	3	4.20	0.94
19	The issues in the game represent the challenges in MSP accordingly.	5	4	5	5	5	5	5	3	5	5	4	4	4	4	4	4.47	0.64
20	I gained more insight into what the important factors in MSP are and how they (can) influence each other.	4	5	4	5	4	5	5	4	5	5	4	5	5	5	3	4.53	0.64
21	I gained more insight into conflicts and co-operation between different sectors (e.g. fisheries, energy, environment).	4	4	5	4	4	4	4	4	5	5	4	5	3	5	3	4.20	0.68

	Questions	P1	P2	P3	P4	Р5	P6	P 7	P8	P9	P10	P11	P12	P13	P14	P15	Mean	Standard Deviation
22	I have a clearer picture on how MSP can be turned into an integrated process.	4	4	4	5	5	4	4	4	5	4	4	5	4	4	3	4.20	0.56
23	I gained more insight into how MSP decisions in different countries (can) influence each other.	4	5	4	5	5	5	4	4	4	4	4	5	4	4	3	4.27	0.59
24	I gained more insights in the problems and barriers of co-operation among countries in MSP.	4	5	3	5	4	3	4	3	4	4	4	5	4	4	3	3.93	0.70
25	I gained more insights in the various ways countries can co-operate in MSP.	4	4	4	5	4	4	5	4	4	4	4	5	3	5	3	4.13	0.64
26	I gained more insight into how decisions on different planning scales (local, regional, national, international) (can) influence each other.	3	4	4	5	3	3	2	3	4	4	5	4	5	0	4	3.53	1.30

Interaction Analysis

Legend: Types of interactions: 1. Consensus (C) 2. Reflection (R) 3. Shared laughter (L) 4. Anecdotal or opinion (O) 5. Explicit knowledge transfer (KT) 6. Openness to sharing Ideas (S)

Team Indigo

Players (clockwise):P1 (Oil and gas)P2 (Note taker, ecological and sustainable energy)P3 (Computer most of the time)

For analysis:

- Explaining concepts or words externalization (5)
- Features of the game socialization (8)
- Real world application combination (6)

Knowledge co-creation instances:

- Socialization (11)
- Externalization (28)
- Combination (18)

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
0:17	Knowledge transfer - P2 and P3 update P1 on what she missed the day	KT		Socio
	before when she had to leave early			
2:16	Shared laughter - P2 jokes about not telling GOD when their goals are	SL		
	set for to see if he doesn't notice and they might get off the hook if			
	they don't achieve some of them			
2:20	Anecdote - P2 shares an anecdote about her graduate supervisor and	0		
	compares him to the minister			
2:40	Reflection - Team discusses what to say to the minister and how to	R		Comb, ext
	word things			
3:20	Reflection - Team plans for their CO2 capture in empty oil fields	R		comb, ext
3:32	Knowledge transfer - P2 asks "What does that mean EEZ?" And P1	KT	Knowledge	ext
	answers at length			
5:10	Opinion - P1 "This is going to take a long time!" (About finding empty	0		
	oil field) - the team is frustrated a little and decide to write it down as a			
	goal and do it later			
6:00	Reflection - Team discusses wind energy	R		Comb, ext
6:45	Knowledge transfer - P2 asks "are those the only wind farms there	KT	Game	Ext
	are?" And P3 says "in reality there are more" and goes on to say			
	where			
7:02	Sharing ideas - P1 warns against building a wind farm in a certain area	S	Real World	Ext
	because she is scared it will impact the tourism in the area. The team			
	listens and puts on layers for tourism			
7:33	Anecdote - P1 notices the tiny boats on the screen and is impressed by	0		
	the graphics but P2 tells her that they will be removed in the next			
	version because no one ever zooms in enough to see them			
7:46	Shared laughter - team laughs when they zoom in and notice all the	L		
	detail they've missed			
8:16	Opinion - P2 "Why is there so much about fish?"	0	Game	
8:20	Knowledge transfer - P1 says that tourism is usually on the islands and	KT	Real World	Socio
	P2 helps P3 find the layer for recreational areas			

8:35	Shared laughter - P2 "There's a shit ton of recreational areas!"	L		
8:50	Sharing ideas - P2 "So can I build a wind farm in that area? I feel like	S		
	it's very Non-appropriate."			
9:00	Knowledge transfer - P1 tells her she needs to make sure there are	KT	Real World	Ext
	cables before building on an island			
9:41	Opinion - P2 says that it wouldn't be appropriate to build on the island	0	Real World	Ext
	where no one lives and cable all the energy to the mainland because a			
	lot of energy would be lost in transport.			
10:28	Consensus - Team decides where to build the wind farms	С		
10:50	Shared laughter - team laughs as they zoom in and see the birds and the	L		
	detail about the farms			
11:29	Reflection - Team discusses where to dredge	R		Comb, ext
11:35	Anecdote - P2 asks from where P1 is and P1 answers (she is from a	0		
	part of Indigo country) and P2 discusses her travels with P1 there			
13:10	Opinion - P1 says that the team should plan for dredging in non-	0		Socio
	productive areas. P3 says "that's a good point"			
13:36	Reflection - team discusses on where to expand and build new	R		Comb, ext
	anchorage sites			
14:05	Opinion - P2 "If we're going to build wind farms there (points to	0		Socio
	screen), then maybe we should expand another one"			
14:35	Opinion - P3 says "I guess it would be cheaper to extend than to build	0		Socio
	a new one", P1 "well we are budget less", P3 "True!"			
14:48	Opinion - P2 "I feel like I'm a bad ecological person, I'm not looking	0		
	at the fish at all!"			
15:00	Reflection - Team looks at goals for ecological targets	R		Comb, ext
15:30	Knowledge transfer - P2 asks how to pronounce "porpoise"	KT	Knowledge	Ext
16:00	Consensus - P2 "we're going to expand that one, it's been settled."	С		
17:37	Opinion - Team is confused about something they see on the screen	0	Game	Socio
	and they're trying to figure it out. P2 says "That looks like tidal to me"			
18:00	Knowledge transfer - P2 "What do they mean by anchorages?" P1	KT	Knowledge	Ext
	explains that it's where big boats anchor at sea and then little boats			
	depart from there to go to shore			

19:00	Reflection - Team discusses the goal of 4% for the military and need to	R		Comb, ext
	do some math to figure out how much they have and need			
20:18	Knowledge transfer - P1 explains to P2 that the math she was doing to	KT	Game	Ext
	figure out the area of their country is wrong and the team turns to stats			
	on the screen instead			
21:05	Consensus - team agrees not to do anything about military for the first	C		
	year			
21:42	Reflection - Team discusses Nature 2000 areas - they need 20% by	R		Comb, ext
	2020			
24:21	Consensus - Team agrees to 5% Nature 2000 total for the next year	С		
	(currently at 0.25%)			
24:35	Knowledge transfer - P1 informs the team about Canada's targets for	KT	Real World	Ext
	Marine protected areas (MPAs)			
25:11	Knowledge transfer - P2 says that she is confused about the difference	KT	Knowledge	Ext
	between Nature 2000 and MPAs are and asks the team to help her out.		_	
	They take the time to look at the map and see the difference			
26:30	Consensus - Team realizes that the 0.25% was for MPA not Nature	KT		
	2000. They are at 4% and agree to increase it to 10% and increase the			
	MPA to 3%			
28:00	Reflection - Team now looks at ecotourism targets	R		Comb, ext
29:00	Shared laughter - P2 jokes that the minister won't get re-elected	L		
29:11	Reflection - Team looks at algae farm targets	R		Comb, ext
30:00	Knowledge transfer - P2 asks about the requirements for algae farms	KT	Knowledge	Ext
	and P1 explains the conditions required for algae farms		_	
30:35	Opinion - P1 "I like how this is my answer to everything, but like why	0		
	don't we just put it Just put it by the islands?"			
31:07	Knowledge transfer - they just saw the plan proposed by team Red and	KT	Game	socio
	the two teams are discussing and Indigo says they'll approve their plan			
32:00	Opinion - P2 "I feel like the islands are starting to have a lot."	0		
32:13	Consensus - Team agrees on where to put algae farms (east of	С		
	Edinburgh)			
32:35	Reflection - Team discusses aquaculture	R		Comb, ext

33:40	Shared laughter - P2 jokes about building fish farms in the islands	L		
34:00	Knowledge transfer - P2 asks what something is on the screen and P3	KT	Game	Socio
	zooms in to find out it's a marina			
34:25	Consensus - team agrees on cod farming to the north	С		
35:00	Reflection - Team looks at shipping goals	R		Comb, ext
36:17	Reflection - Team discusses their overall energy plan	R		
36:20	Opinion - P2 about their energy plan "Should it be to like use as much	0		Socio
	of these empty oil fields for CO2 storage and then like slowly			
	transition to more renewable energy?"			
36:40	Consensus - Team agrees with P2 shared opinion for energy plan	С		
37:17	Opinion - P2 says that once everyone starts putting plans up for	0	Real World	Comb
	approval, the teams will be overwhelmed and approve everything and			
	that it's probably like that in the real world			
38:30	TEAM GOES TO SEE GOD - THEY'RE THE FIRST TEAM			
51:00	TEAM COMES BACK FROM SEEING GOD AND TAKES A			
	COFFEE BREAK			
51:40	Shared laughter - P1 says she won't drink the coffee and P2 says	L		
	"that's ok, I'll drink yours!"			
51:45	Reflection - team looks at fishing goals, which was the minister's main	R		Comb, ext
	concern			
54:04	Shared laughter - Team realizes that the time was turned on while they	L		
	were with GOD and are stressing out about how fast it's going and			
	talking to team Red			
56:29	Opinion - P2 asks if it's really necessary to ask for consultation for a	0		
	plan that's very close to their coast. At 57:45 they just implement it.			
58:50	Opinion - P2 "should we focus on what we want to do a little bit?	0		
	I'm starting to get really stressed out." - because team was spending			
	too much time reviewing others' plans			
59:45	Reflection - team looks at their wind energy goals. They think the	R		Comb, ext
	goals given are too big and will aim for less and inform the minister			
1:03:32	Anecdote - P2 tells the team it's her birthday, team wishes her happy	0		
	birthday.			

1:09:00	Reflection - team now discusses plan for anchorage	R		
1:09:55	Opinion - P2 "We'll have to tell the minister this just ain't gonna	0		
	happen" about wind power			
1:11:00	Reflection - Team looks at MPA and Nature 2000 plans	R		Comb, ext
1:12:10	Anecdote - P2 shares a funny birthday message she received	0		
1:13:28	Knowledge transfer - team asks Elwin how to add MPAs but he	KT	Game	Socio
	couldn't help them			
1:16:25	Reflection - Team reflects on where to put algae farms	R		Comb, ext
1:17:00	TEAM FILLS IN MID-GAME SURVEY			
1:21:42	Team is filling in survey but lets Elwin know that the game isn't			
	working			
1:22:53	Elwin turns off the game and turn it on again			
1:24:34	Computer works again			
1:24:56	Reflection - Team works on MPA again	R		Comb, ext
1:27:40	Knowledge transfer - P2 asks where the delete button (she just took	KT	Game	Socio
	control of the computer) and P3 helps her			

Team Orange

Players P1 (note taker) P2 (girl with open sweater) P3 (girl with braid on the computer) P4 (girl with plaid shirt)

For analysis:

- Explaining concepts or words externalization (3)
- Features of the game socialization (5)
- Real world application combination (3)

Knowledge co-creation instances:

• Socialization (5)

- Externalization (26)
- Combination (22)

Time	Type of interaction and comments	Type of interaction	Analysis	Knowledge co-creation
0:25	Reflection - Can't hear on what	R		Comb, ext
3:15	Consensus	С		
3:43	Reflection - Discussing wind power	R		Comb, ext
4:11	Consensus - P1 adds wind power goal on the board	С		
8:42	Reflection - Team discusses where they plan to wind farms	R		Comb, ext
9:00	Shared laughter - Team laughs at P1's smiley faces on the board that indicate how confident they are about a goal	L		
9:30	Reflection	R		Comb, ext
10:13	Shared laughter about the smiley faces again	L		
10:45	Reflection on goals	R		Comb, ext
11:43	Consensus - on one of the goals and smiley face to sign to it	С		
12:29	Reflection	R		Comb, ext
13:23	Reflection on algae farms	R		Comb, ext
15:30	TEAM GETS A SECOND COMPUTER			
16:15	Shared laughter	L		
17:00	Reflection	R		Comb, ext
18:45	Knowledge transfer - team asks Elwin about something and he gives them an answer	KT	Game	Socio
19:34	Opinion - P1 shares an idea and team agrees	0		
20:50	Knowledge transfer - P2 tells P1 something that P1 deems important and shares it with the rest of the team (about aquaculture)	KT	Knowledge	Ext
22:13	Reflection	R		Comb, ext
23:24	Consensus	С		
23:51	Opinion - P1 shares an opinion about the location of algae farms	0		Socio
24:25	Consensus - team agrees with comment from P1 and explores locations she suggested	С		
25:55	Reflection - team discusses the types of fish for the fish farms	R		Comb, ext

Time	Type of interaction and comments	Type of interaction	Analysis	Knowledge co-creation
27:12	Consensus - Team agrees on a goal and P1 writes it up	С		
27:57	Shared laughter	L		
27:23	Reflection	R		Comb, ext
29:02	Knowledge transfer - from P3 to P1	KT	Knowledge	Ext
29:58	Shared laughter	L		
30:14	Consensus - P1 writes goal on the board	С		
30:50	Consensus - on oil and gas	С		
32:03	Reflection - The team is behind on some goals already	R		
33:09	Consensus - P1 makes a stoic face on the goal they are behind on	С		
33:40	Reflection - Team looks at empty oil fields for carbon capture	R		Comb, ext
34:15	Opinion - P1 "It's too bad you cannot search on it" - about having trouble finding something in the game	0	Game	Socio
34:55	Reflection - Team looks at which oil fields to use for carbon capture	R		Comb, ext
37:35	Consensus - stoic face next to another goal	С		
38:20	Shared laughter	L		Comb, ext
38:30	Reflection - about platforms	R		
39:03	Consensus - another stoic face	С		
39:40	Reflection - Team starts discussing what they will be saying to the minister, especially the institutions they need to make it happen (to put in place, maintain quality, etc.)	R	Real World	Comb, ext
41:30	Reflection - Team goes over their goals	R		Comb, ext
42:45	Knowledge transfer - P4 explains something to P1 about expansion of ports	KT	Knowledge	Ext
43:50	Consensus - stoic face on port expansion	С		
	ONE OF THE COMPUTER DIES AND TECHNICAL			
44:50	FACILITATOR COMES. THE TEAM STILL HAS 1 WORKING COMPUTER			
45:30	Reflection	R		
46:55	Shared laughter - Team notices little birds flying in the game (computer working again)	L	Game	

Time	Type of interaction and comments	Type of interaction	Analysis	Knowledge co-creation
48:15	TEAM LEAVES TO GO SEE GOD			
1:02:00	TEAM COMES BACK TEAM SPLITS ROLES			
1:05:05	Sharing ideas - Team finally split roles and P1 "I hate oil and gas, it's one of those things, ugh."	S		Socio
1:05:20	Anecdote - P2, P3, and P4 discuss their personal lives (mention of significant others)	0		
1:08:06	Shared laughter	L		
1:08:31	Anecdote - Players P2, P3, and P4 tell P1 how they all know each other and where they are from and discuss their accents	0		
1:09:50	TEAM TAKES TIME TO ANSWER MID-GAME SURVEY QUESTIONS AWAY FROM THEIR TABLE			
1:16:20	TEAM COMES BACK			
1:16:20	Reflection - Team talks about reinforcing their plans for anchorage	R		Comb, ext
1:17:05	Shared laughter - at P3 saying "lil' Hag" referring to an area on the map	L	Real World	
1:18:15	Knowledge transfer - P1 says "Can I ask you guys for some advice" to her team about how to go communicate with the other teams about renewable energy. They tell her to do a gathering with all the representatives	КТ	Real World	Comb, ext
1:18:40	Shared laughter - when they notice how quickly the time is going	L		
1:19:00	Reflection - P1 asks the team to go over renewable energy strategy before she goes to meet with other teams	R		Comb, ext
1:19:30	Reflection - member from team Red comes to talk about MPA with P4 who gives them advice. The team says they will discuss it among themselves	R		Comb, ext
1:22:30	Reflection - team discusses among themselves what they'll do for MPAs based on what the member from Team red told them	R		Comb, ext
1:22:45	Knowledge transfer - Team updates P1 on what they were doing since she had left to coordinate the meeting with the other reps	КТ	Game	Ext

Time	Type of interaction and comments	Type of interaction	Analysis	Knowledge co-creation
1:24:24	Knowledge transfer - P1 asks for help on using the computer and setting goals for her meeting about renewables, P2 shows her how to navigate the game	КТ	Game	Socio
1:28:30	Reflection - Member of team Red comes to discuss shipping routes with P2	R		Comb, ext

Team Purple

- P1 (Oil and Gas, board note taker)
- P2 (Military)
- P3 (fisheries and ecology)
- P4 (Renewable resources)

For analysis:

- Explaining concepts or words externalization (6)
- Features of the game socialization (13)
- Real world application combination (7)

Knowledge co-creation instances:

- Socialization (15)
- Externalization (37)
- Combination (31)

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
0:24	Reflection - P3 Asks question to the group, P1 and P2 answer. Then P3 says "it makes sense because we haven't implemented anything	R		Comb, ext
	15 says it makes sense because we haven t implemented anything			
	new."			
0:42	Reflection - P4 asks the group to confirm an information about their	R	Knowledge	Comb, ext

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
	numbers - 20,000 is the answer			
1:05	Reflection - P1 asks a question about what approach they should take.	R		Comb, ext
	P2 answers by "preferably, they would prefer"			
1:48	Knowledge transfer - P3 to P4 - "how many wind farms do we	KT	Game	Ext
	have?", P3 "it should be at the top I think"			
2:12	Consensus - P1 asks players about goals for the next 3 years and all	С		
	agree			
2:35	Shared laughter - laugh at the lofty goals they are setting for	L		
	themselves			
2:37	Consensus - Agree on long-term strategy	С		
2:49	Opinion - P3 "I think oil and gas should be" P2 "LOW!"	0		Socio
2:57	Reflection - Team looks at their goals for oil and gas and keeps	R		Comb, ext
	discussing what they want to do			
3:46	Reflection - P1 shares with the team the insights the Minister told	R		Comb, ext
	them about oil and gas and how that should inform their goals			
4:24	Consensus - P1 proposes something, all agree	С		
5:10	Reflection - Team reflects on Nature 2000 areas - what they have and	R		Comb, ext
	their goals. P1 steps back from board to come help P2 at the screen			
6:00	Sharing ideas - P2 "I would say" and P1 "maybe 10% by 2025%"	S		
6:40	Consensus - on the ideas shared in point above	С		
7:00	Reflection - Team reflects on how to get multiuse out of MPAs	R		Comb, ext
7:20	Reflection - Team reflects on algae and fish farm goals	R		Comb, ext
7:35	Explicit knowledge transfer - P1 "I don't understand where these	KT	Game	Socio
	empty fields are on the map. What would they be represented as?" P2			
	and P3 answer her			
9:27	Reflection - P3 "Is it realistic to have all of these goals in the same	R	Real Life	Comb, ext
	time period though?", P1 "Not necessarily, we don't necessarily need			
	to have these (points to notes) for 2020." P3 "I'm not sure how all			
	of this works, but is it realistic to say we'll start a bit of everything?"			
10:50	Consensus - Team reaches consensus on goals	С	Game	

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
11:40	Shared laughter - When Elwin teaches them how to "pan" by clicking	L		Socio
	the right mouse button, something the team had been trying to figure			
	out for the last 10min			
13:15	Reflection - Team discusses goals for military, using stats from the	R		Comb, ext
	game and referring to the cards given to them with their goals			
15:10	Consensus - team reaches consensus, there isn't anything to do about	С		
	military and in fact they can diminish the area used by military is			
	needed			
15:40	Reflection - Team discusses goals for tourism, P1 says they need a	R	Real Life	Comb, ext
	"strong engagement plan" with fishermen			
17:05	Shared laughter - P3 "Is that really all we have for goals?", P2 "It	L		
	seemed so much more daunting yesterday!"			
17:28	Reflection - Team reflects on long-term goals, P3 "Should we create	R		Comb, ext
	more long-term ones?"			
18:12	Reflection and knowledge transfer - P2 asks questions to P1 about	R, KT	Knowledge	Comb, ext
	wind power, "How do we do that?", P1 and P3 try to answer but			
	don't really know the question. P1 realizes that she doesn't know and			
	P2 explains it to her. P2 "I don't know enough about wind turbines to			
	know how big they are."			
19:46	Shared laughter - P4 informs the group that the wind turbines have	L	Game	Socio
	gone up in power and the team happily laughs realizing that now they			
	have a lot less work to do concerning wind turbines.			
20:20	Reflection - Team discusses what they need to do about wind energy	R		Comb, ext
	given all the new information			
21:15	Knowledge transfer - P4 asks a question about exploring new sites for	KT	Knowledge	Socio, ext
	wind turbines and P2 and P3 answer as best they can but saying that			
	they aren't experts in wind energy			
22:17	Opinion - P3 "I think that's doable." - about the tentative goal for	0		
	wind energy that P2 set			
23:05	Opinion - P3 "I like the idea of doing more efficient ones", P2 "And I	0		Socio

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
	like the idea of sticking with new sites." - about expanding wind			
	energy			
23:26	Reflection - Team discusses plans for 2030 regarding fishing and new sites for wind farms and even 2050	R		Comb, ext
27:30	Reflection - Team reflects on oil and gas expansion after getting some information from Elwin on how certain layers of the game work	R	Game	Comb, ext
29:00	Reflection - Team reflects on aquaculture plans, with a focus on the North (as asked by their goal cards)	R		Comb, ext
30:27	Knowledge transfer - P4 who has his own computer asks the team how to access the layers about aquaculture. P1 and P3 both answer in unison "They're under EEZ" and P3 takes time to give P4 more information after	КТ	Game	Socio
31:06	Opinion - P3 "I think we'll have to increase the military, sorry [P2]"	0		
31:30	Explicit knowledge transfer - P1 "Oh there's already some overlap in the protected areas.", P3 "Well, 80% of the Nature 2000 can have fishing, because only 20% has to be MPA."	КТ	Knowledge, Game	Socio
32:17	Reflection - Team looks at expanding MPA areas and discusses species they want to focus on (birds vs fish and which species exactly)	R	Real World	Comb, ext
34:00	Knowledge transfer - P3 explains where they should create MPAs to help the cod fisheries industry and P2 says "that's the influence for your project!", both laugh.	КТ	Real World	Ext
34:35	Reflection - Team reflects on international relations with other countries and how their decisions about MPAs might affect the plans of other countries and vice versa	R	Real World	Comb, ext
37:00	Knowledge transfer - P4 asks team what they're "game plan" is when they go talk to GOD and P2 explains to him what they are planning on doing and shows him some information on the screen that he did not understand about carbon sequestration in empty oil wells and selecting for MPAs	КТ	Game	Ext

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
42:20	Reflection - P1 and P2 talk about economic development plans (trying to be economically independent from other countries) while P3 is still explaining to P4 what their goals are	R	Real World	Comb, ext
45:00	Reflection - Team looks at the role of offshore wind (emphasis) and how that can affect the aesthetics of the cultural sites on land	R	Real World	Comb, ext
45:30	Shared laughter	L		
46:40	Reflection - Team discusses how many boast they will need for offshore wind farms maintenance	R		Comb, ext
48:30	Knowledge transfer - P2 reads information from card to other team mates to inform them about oil and gas safety standards	КТ	Game	Socio
49:00	Shared laughter - Fishing person from another team comes and says that they "need to talk" to their fishing person because they are trespassing. Team laughs nervously.	L		
50:30	Shared laughter - P2 "Oh god, it's September, we just lost 4 months!" Team laughs	L		
51:22	Shared laughter - P3 " Oh my god it's October!" P2 "Time doesn't wait"	L		
52:21	Knowledge transfer - team asks Igor if they need to wait for teams to approve their plans and Igor tells them yes and that they should look at their spatial plans and better develop their plans and start consultation	KT	Game	Socio
54:15	Reflection - Team reflects on which teams they need to talk to and about what	R		Comb, ext
54:45	Shared laughter - team laughs again thinking back about fishing person from Scotland (Team Indigo) telling them that they "need to talk"	L		
55:20	Reflection - Team reflects on negotiations for fishing	R		Comb, ext
56:00	Knowledge transfer - P2 asks player in Team Red how to make consultation plans and one of the players explains it to them	KT	Game	Socio
58:30	Knowledge transfer - Team finally asks Elwin about how make plans,	KT	Game	Socio

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
	edit and delete them. Creating consultation plans versus other types of			
	plans.			
1:00:13	Knowledge transfer - Elwin informs them that they don't need to wait	KT	Game	Socio
	for other teams to approve their plans			
1:02:30	TEAM LEAVES TO SEE GOD			
1:14:10	TEAM COMES BACK FROM SEEING GOD, P1 AND P3			
	CHANGE PLACES			
1:15:00	Reflection - P2 and P3 reflect on their common plans and P1 and P4	R		Comb, ext
	reflect on their plans. They have separated into 2 teams (based on			
	their roles) because they have 2 computers.			
1:16:25	Knowledge transfer - P1 says that she "doesn't really know what	KT	Knowledge	Ext
	Nature 2000 means" and P2 answers that it "has some protection but			
	that MPA means no activity in the zone"			
1:17:00	Reflection - P1 and P4 create a plan for wind energy, independent of	R		Comb, ext
	the other two			
1:18:00	Reflection - P2 and P3 reflect on their plan for MPA expansion	R		Comb, ext
1:19:37	Consensus - P2 and P3 reach consensus on "January 2019" for their	С		
	plan			
1:20:00	Knowledge transfer - P4 asks P1 about how to connect electricity	KT	Game	Socio
	cables on the computer.			
1:21:04	Opinion - P1 "I don't understand, we're just arbitrarily making them	0		
	a certain size. Like wind farms, they're tiny, yay. Congrats to us"			
1:21:20	RESEARCHER COMES TO TELL THEM TO FILL UP THE			
	SURVEY			
1:22:15	Reflection - P1 and P4 still reflecting on their plan for wind turbines	R		Comb, ext
1:22:30	Reflection - P2 and P3 discuss their plan for expanding their MPA	R		Comb, ext
	and trying not to affect other countries in the process. They are using			
	hand drawn maps instead of the computer.			
1:24:02	Shared laughter - P1 accidentally deletes something on the computer,	L		
	freaks out and the team laughs.			

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
1:24:44	Reflection - Member of team orange comes to discuss with P3 about	R		Comb, ext,
	protected areas and coordinating their plans			socio
1:25:01	Reflection - Member of team red comes to discuss oil and gas with P1	R		Comb, ext,
	and set a meeting with other countries			socio
1:25:20	Knowledge transfer - Member of orange team asks "Can you have an	KT	Knowledge	Ext
	MPA inside a nature 200 area?" P2 and P3 "Yeah, I think so"			

Team Red

P1 (Note taker)

- P2 (Computer user)
- P3 (Note taker)

For analysis:

- Explaining concepts or words externalization (5)
- Features of the game socialization (12)
- Real world application combination (3)

Knowledge co-creation instances:

- Socialization (11)
- Externalization (23)
- Combination (19)

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
0:25	Knowledge Transfer - P2 tells others how to use the different layers on	KT	Game	Socio
	screen			

Time	Type of interaction and comments	Type of	Analysis	Knowledge
0.50		D		Co-creation
0:58	as required of them on their goal cards	К		Comb, ext
3:01	Consensus - Team reaches consensus on what to do with ports and agree to revisit their decision later if needed	С		
3:50	Reflection - Team discusses military goals based on the information given to them on the cards	R		Comb, ext
5:40	Consensus - Team agrees on next steps for military, P3 takes notes	С		
6:30	Opinion - Talking about extending military areas, P3 says "I was thinking to expand this one"	0		
7:45	Consensus - P1 explains to P2 her plan for fisheries and P1 agrees	С		
8:55	Knowledge transfer - Professor comes and P2 asks what a Nature 2000	КТ	Knowledge	Ext
10:30	Reflection - Team revisits their fishing goals, looking at stats on the screen and taking notes	R		Comb, ext
11:35	Shared laughter	L		
11:55	Reflection - Team plans for algae farms	R		Comb. ext
12:15	Reflection - Team tackles their oil and gas goals	R		Comb, ext
14:53	Knowledge transfer - P1 asks the team about the darker areas on the screen and P2 answers	КТ	Game	Socio
15:30	Reflection - Team is still looking at screen and trying to plan for oil and gas. Lots of confusion as the team tries to figure out all the layers. P2 at 16:30 "Are they empty or are they just not in production?"	R	Game	Comb, ext
18:10	Reflection - More planning on (?) can't hear. MPA I think	R		Comb, ext
18:50	Knowledge transfer - P3 gives advice to P2 on how to navigate the information on the screen relating to carbon storage in the empty oil wells.	KT	Game	Socio
21:40	Knowledge transfer - P2 "I still don't even know what a carbon sink means", P3 "It means that you extract carbon dioxide…" P2 "Got ya"	KT	Knowledge	Ext
24:05	Reflection - team plans shipping	R		Comb, ext

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
24:20	Reflection - Team switches to planning agriculture, mostly between	R		Comb, ext
	P1 and P2			
24:242	Shared laughter	L		
25:33	Knowledge transfer - P2 asks about integrated management of	KT	Knowledge,	Ext
	aquaculture farms in the ocean and P3 then P1 answers - P2 "You can		Real World	
	put an algae farm on top of a fish farm, can't you?"			
26:00	Reflection - talking about farming planning. P2 gives the computer	R	Game	Comb, ext
	and mouse to P3 to let him plan as he sees fit			
28:40	Shared laughter - Igor asks the room is any team feels ready to go see	L		
	the minister. P3 whispers as a joke to his team "yes". They giggle.			
29:46	Consensus - P3 gets something working on the computer. All shake	C	Game	
	they head in agreement to what he did and P3 exclaims "Hooray!"			
31:16	Knowledge transfer - P2 asks team Indigo if they can see the plan they	KT	Game	Socio
	just proposed. Both teams have just discovered that they can share			
	information. Indigo says that they don't need to approve it, that Team			
	Red can just go ahead and do their plan without their approval.			
34:15	Knowledge transfer - P2 does something on the computer and P1 and	KT	Game	Socio
	P3 inform him that he can do it another way in this case because of			
	several things			
34:45	Reflection - Team goes back to aquaculture plan	R		Comb, ext
35:50	Consensus - Team agrees on where to build farms	С		
36:33	TEAM GETS ANOTHER COMPUTER WHICH P3 TAKES			
37:15	Knowledge transfer - P2 "There are no measuring tools so I'm not	KT	Game	Socio
	sure what I'm building." P3 "the measure tools is one of those cubes is			
	100 square kilometers"			
39:00	Shared laughter - Laugh at P1 volunteering P2 to take notes on the	L		
	board. P1 gets up to write notes on the board in preparation with			
	meeting with GOD			
40:30	Reflection - P1 and P2 discuss the size of nature 2000 areas	R		Comb, ext

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
42:00	Reflection - Team reflects on what plans to propose before	R		Comb, ext
	implementation			
43:25	Knowledge transfer - P2 explains to P3 the country's fishing areas on	KT	Knowledge,	Socio
	the screen		game	
44:40	Knowledge transfer - P2 asks what a certain area in the military layer	KT	Game	Socio
	means and P1 and P3 answer			
46:00	Reflection - P1 and P2 reflect on which military areas to expand	R		Socio
46:35	Knowledge transfer - P2 "Can we put a practice zone right next to a	KT	Knowledge	Ext
	fly zone?" P3 "Yup." And then expands			
48:30	Consensus - P2 explains to P1 his plans for the military, P1 agrees and	С		
	writes it up on the board			
49:40	Reflection - P1 and P2 plan out the MPA and military	R		Comb, ext
53:45	Reflection - Team talks about oil and gas expansion	R		Comb, ext
54:15	Shared laughter - The team realizes that the time is speeding up	L		
54:40	Shared laughter - Team talks to Indigo and laugh at how fast time is	L		
	going			
55:20	Shared laughter - team laughs with another team again about how fast	L		
	the time is going			
56:40	Shared laughter - P1 makes a joke about all the jobs created in the	L	Real World	
	game in such a short amount of time			
57:20	Knowledge transfer - Team talks to team Purple and lets them know	KT	Game	Socio
	that they aren't waiting for consensus to go ahead with their plans			
58:15	Shared laughter - P2 tells the other teams to go approve their MPAs	L		
	and makes everyone giggle			
1:00:22	Reflection - Reflect on what they will tell GOD during their meeting	R		Comb, ext
	and P1 writes it up on the board			
1:02:39	Someone comes to record the conversations of the team and leaves at			
	1:04:30			
1:03:40	Reflection - Team reflects on the different teams and stakeholders they	R	Real World	Comb, ext
	will need to consult for all of their plans			

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
1:04:42	Shared laughter - Team laughs at what the man who recorded them	L		
	said			
1:06:05	Shared laughter - P3 proposes a giant MPA that is multinational and	L		
	P2 jokes abound invading another country			
1:08:00	Team Red and Team Yellow joke around about getting approval from			
	people and all the work they need to do before seeing the minister			
1:08:47	Shared laughter - P1 from team indigo says "Were just doing it	1		
	anyway" in response to waiting for approval from other teams. Team			
	Red laughs.			
1:09:45	Shared laughter - The team high fives and laughs after going ahead	L		
	with a plan without waiting for team Yellow's approval. They then			
	joke about building a military base along the border with team Yellow			
1:11:05	Reflection - Team reflects on the work to be done on the harbour	R		Comb, ext
1:12:15	Consensus - Team reaches consensus on next step	С		
1:12:50	Opinion - P1 "Maybe don't put that in"	0		
1:13:00	Shared laughter - member of team yellow comes to tell the team to	L		
	approve their plan and they laugh			
1:13:15	Knowledge transfer - P3 tells the player from team yellow how to	KT	Game	Socio
	make their port bigger (he gets up to go show them). P2 acknowledges			
	that he didn't do it right for their team and fixes his mistake			
1:15:25	TEAM LEAVES TO GO SEE GOD			
1:25:20	TEAM COMES BACK FROM SEEING GOD			
1:28:22	Reflection - Team discusses how to reduce their CO2 emissions	R		Comb, ext

Team Red

Players: P1 P2 P3 (Note taker) P4 (Player arrives late)

For analysis:

7. Explaining concepts or words - externalization (6)

8. Features of the game - socialization (14)

9. Real world application - combination (6)

Knowledge co-creation instances:

1. Socialization (16)

2. Externalization (36)

3. Combination (27)

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
0:30	Reflection - Team discusses extending sea ports and the effect on	R	Real World	Comb, ext
	wind farming			
1:31	Consensus - P3 "Extend sea port", P1 "That's the main priority", P2	С		
	"Mmhm"			
1:50	Knowledge transfer - P1 asks about shipping intensity and P2 and P3	KT	Game	Ext, socio
	try to answer			
2:30	Knowledge transfer - P1 asks questions about the geography of their	KT	Knowledge,	Ext
	country and sea. P3 answers using printed maps		game	
3:35	Consensus - consensus on where not to build	С		
4:35	Reflection - team refines their shipping plans for the coming years	R		Comb, ext
5:20	Reflection - Talking about wind farms: location, intensity, and	R	Real World	Comb, ext
	stakeholder engagement			

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
5:50	Consensus - expand the wind farm areas the team already has and	С		
	worry later about new sites			
7:30	Reflection - Team discusses what they will say to the minister about	R	Real World	Comb, ext
	stakeholder engagement, all team members agree that stakeholder			
	engagement is important			
8:30	Reflection - talking about wind energy expansion	R		Comb, ext
9:00	Sharing ideas - P2 says that the team should check if the wind farms	S		Ext
	could double as aquaculture			
9:05	Consensus - Team agrees with P2's proposition	С		
9:30	Knowledge transfer - P1 explains some of the layers (aquaculture) to	KT	Game	Socio
	the rest of the team			
10:10	Sharing ideas - P1 "This is a nice area for aquaculture"	S		
11:09	Knowledge transfer - P2 "Is it easier to start with the wind farms and	KT	Knowledge,	Ext
	then aquaculture or aquaculture and then wind farms?" P1 "Wind		Real World	
	farms. I think the wind farms act as an anchoring point for the farms".			
	P3 "We've got the aquaculture expert here!"			
11:50	Reflection - Team discusses where to put their wind farms combined	R		Comb, ext
	with the aquaculture farms			
12:45	Reflection - Team now discusses 5 year plan of their different goals	R		Comb, ext
14:14	Reflection - Team takes the maps and start to draw out their plans on	R		Comb, ext
	them			
15:00	Reflection - P3 reminds the team of their renewable energy directions	R		Comb, ext
	from the cue cards given to them			
15:55	Reflection - Team tackles goals for sand and gravel extraction	R		Comb, ext
16:17	Shared laughter - P2 makes a joke about an impending sand and	L	Real World	
	gravel shortage			
17:15	Knowledge transfer - P1 explains to P3 where the anchorages are on	KT	Game	Socio
	the maps			
18:00	Knowledge transfer - P2 "anchorages have to be in deep water?" P1	KT	Knowledge	Ext
	"Yeah"			

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
18:50	Reflection - Talking about anchorage sites and the need to expand	R		Comb, ext
	them			
20:05	Opinion - P1 thinks they've gone too far in their planning and need to	0		
	wait to talk to the minister to see what their next steps should be			
20:12	Consensus - P2 and P3 agree what P1	С		
20:53	Reflection - Team discusses renewable energy and the goal of a	R		Comb, ext
	national grid. They are confused about what is expected of them			
22:27	Consensus - P2 "Basically any cable we want to add, we should try to	С		
	overlap with existing cables", P1 and P3 "yeah"			
23:16	Shared laughter - the team realizes that one of their cables goes into	L		
	the Green country zone but there is no Green country so they can do			
	what they want in tat zone. P1 jokes about invading countries that			
	give them trouble.			
24:22	A FOURTH MEMBER OF THE TEAM SHOWS UP, SITTING			
	BETWEEN P1 AND P2			
24:50	Knowledge transfer - P3 updates P4 on what they've done during his	KT	Game	Ext, socio
	absence - 5 year plan with a focus on shipping			
25:45	Opinion - P4 plays devil's advocate to get the team to rethink where	0		
	they want to expand the seaport.			
26:50	Consensus - P4 agrees once it is explained to him and the team looks	С		
	at what the ground is made of			
27:00	Reflection - Team revisits wind farms	R		Comb, ext
27:43	Opinion - P1 "I'm thinking that should be a longer term plan than 5	0		
	years, what do you guys think?", others agree			
28:30	Team discusses bluffing to god because they assume he won't know			
	and they think they can bluff the numbers			
29:35	Knowledge transfer - P4 explains to them what the Sea of Colours	KT	Knowledge,	Ext, socio
	grid could mean		Game	
30:00	Reflection - Team reflects on plan for MPA and Nature 2000 areas	R		Comb, ext
31:40	Reflection - P1 thinks that the timeline for wind energy targets is	R		Comb, ext

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		Interaction		co-creation
22.20	Unrealistic and the team agrees and tries to rethink their timeline	D		
33:20	Reflection - Talking about new wind farm plan	R		Comb, ext
33:47	Shared laughter - When P4 points out how much they need to expand their wind farms	L		
34:50	Knowledge transfer - P4 tries to understand some layers on the screen and P1 and P2 explain it to him	KT	Game	Socio
36:00	Opinion - P4 proposes something but P2 and P3 realize that he doesn't understand the units of what he is proposing and explain it to him.	0	Game	Ext
37:35	Reflection - Team reflects on their 10 year plan and how ambitious they should be with wind energy in 10 years - P4 "How far can we stretch it from our goal?"	R		Comb, ext
39:20	Shared laughter - Team jokes about their 5 year plan now becoming a 14 year plan	L		
41:10	Reflection - Team is focused on the computer map trying to decide where to expand their wind farm for their "14 year" plan	R		Comb, ext
41:50	Knowledge transfer - P3 asks a question about the layers, P1 and P2 answer	KT	Game	Socio
42:15	Knowledge transfer - P3 asks a question about the layers, P1 and P2 answer	KT	Game	Socio
42:30	Shared laughter - Team jokes about their 14 year plan, p1 "I hope you get re-elected for the next 3 terms minister!"	L		
43:19	Reflection - Team now focuses on their Nature 2000 areas and MPA areas	R		
45:12	Knowledge transfer - P2 "Are there things were not allowed to do in a Nature 2000 area?" P3 tries to answer as best she can but has limited knowledge	KT	Knowledge	Ext
46:40	Knowledge transfer - P2 tells P3 how to operate the program to see what she wants	KT	Game	Socio
47:30	Reflection - Team discusses how many Nature 2000 areas they	R	Game	Comb, ext

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
	should have vs MPA and tries to understand the numbers on the cue			
	cards given to them			
49:45	Reflection - Team starts to go over what they will be saying to GOD,	R		Comb, ext
	and specifically about shipping plan in the next 5 years			
51:00	Reflection - P1 wants to emphasize the need to tell the minister about	R		Comb, ext
	stakeholder engagement			
52:40	Shared laughter - Team laughs at how quickly the time is passing by	L		
	in the team and how they lost a year while chit chatting			
53:30	Knowledge transfer - P2 explains to P4 how the local area network	KT	Knowledge,	Socio
	works		Game	
54:00	Anecdote - P4 tells P1 a personal anecdote, unrelated to the game	0		
55:10	Reflection - Team discusses if they should discuss ecology with the	R		Comb, ext
	minister and then develop a plan			
56:15	Shared laughter - Team laughs at what team red is saying about	L		
	MPA's and approving team yellow's MPAs			
57:20	Knowledge transfer - P1 asks where the MPAs are located on the	KT	Game	Socio
	layers, P2 answers			
59:00	Reflection - team discusses goals for oil and gas	R		Comb, ext
59:40	Shared laughter - team laughs as they all agree to just not mention oil	L		
	and gas targets to the minister			
1:00:10	Opinion - P1 says "I think what we do here is that we highlight the	0	Real World	Comb
	jobs it'll create"			
1:02:35	Shared laughter - Team laughs as P1 says they need to emphasize	L		
	how they work hard and relax on their yatch in their nature 2000			
	areas			
1:04:10	Shared laughter - P1 jokes that it's taking them 2 years to get a	L		
	meeting with the minister			
1:04:48	Knowledge transfer - P1 says he doesn't understand why they need to	KT		Socio
	approve team red's plans.Red says they need their approval to go			
	ahead because it's affect them			

Time	Type of interaction and comments	Type of	Analysis	Knowledge
		interaction		co-creation
1:05:30	Opinion - P1 says that he thinks they should just go ahead with their	0		
	plans because it's taking forever to see the minister and they'll be			
	behind			
1:09:30	Reflection - Team moves ahead and discusses which port to expand	R		Comb, ext
	but are having trouble making it happen on the computer			
1:10:50	Knowledge transfer - player from team red comes to help P1 and the	KT	Game	Socio
	rest of the team to expand their port			
1:11:33	Reflection - team finds out they can't expand the port they wanted to	R	Game	Comb, ext
	so they try to find another solution. They're having trouble making it			
	work and give up after a few minutes			
1:15:42	Reflection - Team decides to work on their wind energy plan instead	R		Comb, ext
1:16:20	Knowledge transfer - Team gets Elwin to show them how to expand	KT	Game	Socio
	their port. Elwin can't find how to work it out and asks them to work			
	on something else while he talks to the developer remotely			
1:19:20	BREAK FOR THE MID-GAME SURVEY BUT TEAM STILL			
	WORKS AS P1 FILLS IT IN			
1:20:50	Knowledge transfer – OP1 comes and wants to talk about renewable	KT		Ext, socio
	energy. The team says that they didn't assign roles and OP1 tells			
	them that the minister warned them not to do that.			
1:21:54	Knowledge transfer - Elwin comes back to fix the problem - they	KT		Socio
	have to reboot!			
1:22:06	TEAM LEAVES TO GO SEE GOD			

Debrief Section

Time	Type of interaction and comments
00:15	RED3 - "It was interesting because we were all given mandates and all that but we never took into
	consideration the financial aspect and budget into consideration and had we had that as an added
	consideration, I don't think we would have achieved as much as we would have wanted to."
00:50	GOD - When you get to implementation you're now at the regulatory stage and you might have something
	called a regulatory impact assessment and that's when cost and benefits comes into things The impact on
	economies versus the effect you're trying to achieve."
01:30	Facilitator speaks to thank GOD and asks the players if they want to share any lessons learnt with the rest of
	the group
02:40	YELL2 - "I thought it was really interesting how at the beginning we were all running around the room,
	talking to each other, starting plans. And then we learned that we didn't have to get approval from everyone
	and we were all just at our table clicking away It was interesting to see how when we thought we needed
	everyone to agree, we were all ready to do so but as soon as we realized we didn't have to come to a collective
	agreement it was just like every man for himself a little bit."
03:40	Facilitator - Explains how collaboration is all true but in the end, each country has the power to decide for
	themselves until conflict arises.
04:20	RED2 - "What I find interesting is that this kind of took us away from what we had been working on over the
	past 3 weeks. When we were doing our projects, we were all focusing on one thing all the time so you really
	didn't think about everything else that was going on at the same time"
05:15	Facilitator - Even if you specialize you still want to get a general knowledge of the context in which you
	operate and how your actions fit in to that.
05:50	IND2 - "When we started to plan everything, we started to realize that everything conflicted and you needed
	to have some trade-offs (). It was a bit of a reality check."
06:15	RED3 - "We kind of came to the same conclusion because when we were listing out our objectives we had so
	many big projects that had to be completed within 3 years, by 2020, but we quickly realized that that wasn't
	feasible and that we had to downsize and extend our 3 year plan to 5 or 10 or 14."
06:38	GOD - "That was a very comprehensive list. A real minister would not have advised you 'Please let me know
	if you can't reach a goal'. Nothing would have been said and then it would have backfired. I was kind to say
	it."
07:30	OR1 - " I really got a hands on experience on how something like you guys have developed can be to

	facilitate interactions that you don't normally see happening in real life. But I think interactions are always
	very formal, and much less interactions, but I really experienced hands on how this can help being people,
	funnily enough, closer together."
08:10	Facilitator - Points out that OR1 had no knowledge of MSP before coming and that it was a good crash course
	on MSP
08:48	YELL2 - "I think it would be interesting if you had this with stakeholders that didn't know about marine
	spatial planning. It really allows them to see that maybe not everyone working in government is incompetent,
	maybe it's just REALLY hard. It gives you that perspective that there's so much going on at once. No wonder
	these things take so much time."
09:10	Facilitator - The system is so complex and hard to understand that even if everyone has good intentions,
	morals. A lot of decisions go for rational choice. But the interactions between people and all the complexity
	can lead to very weird outcomes. This is a characteristic of complex system. If every part is rational, their
	interactions are not.
10:22	GOD - "We have these very formal processes, but the game creates a safe place to try it out. To understand
	how messy it is and at the end we realize that we're all in the same mess () There's no stake to be lost in the
	game."
11:08	RED2 - "I felt very unpressured () We wore every hat"
11:30	OR1 - "I'm really curious, how would this work in a group of people that works together and you facilitated
	an actual decision-making process?"
11:42	Facilitator - "We will see!" You would need to elaborate a design first. With the new version being developed
	and launched in 2018, the objective is to go and play in the North Sea. It will still be called a game but it will
	be less of a game because it won't be as abstract. The data will never be 100% accurate. You cannot say that
	the outcomes in the game can be applied to real life. That's not the point. It's about conceptual learning,
	understanding the mechanisms, getting people to talk and understand the direction or cause and effect
	relationship but not the precision of cause and effect.
13:33	OR1 - "Even if you increase levels of trust and collaboration between stakeholders then they can take them
	into their real life."
13:45	Facilitator - There are different schools when you talk about using GIS for decision making. One school says
	that you always need more data, more accuracy, etc. Anything that in the game that is a little different from
	reality will create distrust between the participants and the game. A solution would be to create more until you
	have reality. But that's not going to happen anytime soon. Another school says that it doesn't matter so much.
	That even if you have cartoons of abstracts people trust it more. It allows for your own interpretation and
	create your own meaning. These schools constantly go against each other.

14:48	OR1 - "It seems like one focuses on the process and the other on the outcome."			
15:10	GOD - Three levels: goals, objectives, outcomes - There are thousands of orders of magnitude in precision to			
	jump from one to another. You also have to look at the initial amount. An increase in 2.5% in cod fisheries			
	would just mean 1000 more cod and that really wouldn't affect fishing in Canada. There are orders of			
	magnitude of different for different decisions. The hyper precision of things distracts from the actual			
	discussion.			
16:30	Facilitator - That being said, it's good that in small expert circles they are trying to create smaller models the			
	are very precise. They'll give the information needed to bigger models			
16:46	OR1 - "You can also use it for experimenting."			
16:59	Facilitator - That is our ambition, it's where want to go. You would play for a few hours, develop one scenario			
	based on certain decisions. And you do it again, and again. And then you reflect on them. You can't assume			
	they're true but you can think of underlying assumptions and the direction they're taking. You can then have			
	discussions about the direction. It's about social learning and getting the deeper meaning behind the world that			
	you created.			
18:14	GOD - "The planning process is a process not to achieve that (meaning the virtual world planned) its a process			
	that beings together stakeholders together to understand the issues" The process helps them understand			
	their perspectives.			

Summary of Quality of Interactions

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Team Indigo

Time: First 90 minutes

	Quality Parameter	Occurrences
Со	onsensus	7
Re	flection	19
La	ughter	8
An	ecdotes and	20
Op	pinions	20
Kn	owledge Transfer	16
Sh	aring Ideas	2

Team Orange

Players:

Quality Parameter	Occurrences
Consensus	12
Reflection	23
Laughter	10
Anecdotes and	5
Opinions	5
Knowledge Transfer	7
Sharing Ideas	1
	Quality Parameter Consensus Reflection Laughter Anecdotes and Opinions Knowledge Transfer Sharing Ideas

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Team Purple

	Quality Parameter	Occurrences
	Consensus	7
Time: First 90 minutes	Reflection	31
	Laughter	10
Players: 4	Anecdotes and Opinions	5
	Knowledge Transfer	16
	Sharing Ideas	1

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Team Red

Players:

Time: First 90 minutes

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Quality Parameter	Occurrences
Consensus	7
Reflection	20
Laughter	13
Anecdotes and	2
Opinions	
Knowledge Transfer	14
Sharing Ideas	0

Team Yellow

		Quality Parameter	Occurrences
		Consensus	7
Time: First 90 minutes		Reflection	27
		Laughter	10
Players: 4		Anecdotes and Opinions	7
		Knowledge Transfer	20
		Sharing Ideas	2