

**QUESTION 10 – DO YOU BELIEVE THAT YOUR COMPANY/ORGANIZATION WOULD BE INTERESTED IN THE DEVELOPMENT OF SERIOUS GAMES?**

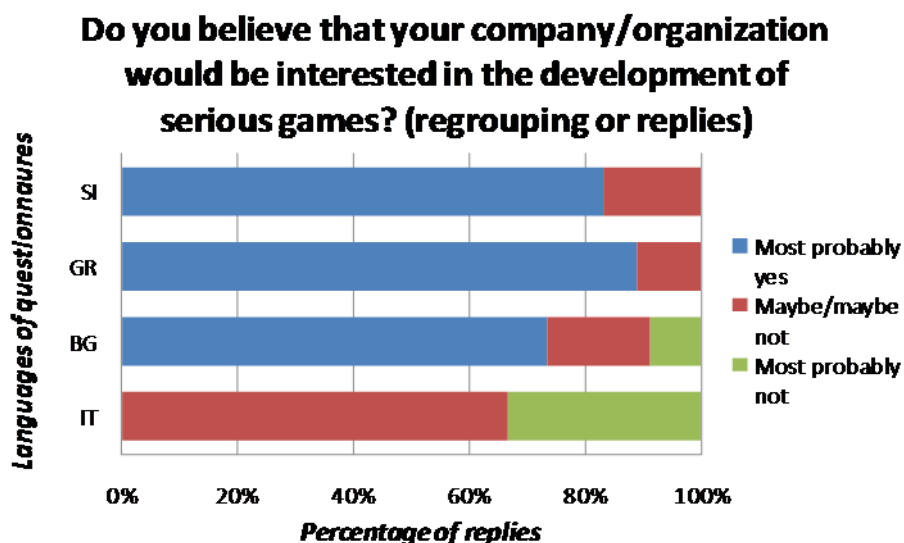
**TABLE 27** – Replies received from the supply side questionnaire for question: “Do you believe that your company / organization would be interested in the development of ‘serious games’?”.

Language Replies	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
<b>Definitely</b>	0	0	14	3	2	1	1	<b>21</b>	36.8
<b>Probably</b>	1	0	11	5	3	0	0	<b>20</b>	35.1
<b>Maybe/maybe not</b>	0	2	6	1	1	0	1	<b>11</b>	19.3
<b>Probably not</b>	0	1	3	0	0	0	0	<b>4</b>	7.0
<b>Definitely not</b>	0	0	0	0	0	1	0	<b>1</b>	1.8
Total replies	<b>1</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>57</b>	98.3%
Not replied	1	0	0	0	0	0	0	1	1.7%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

**CHART 45** – Aggregate results from the supply side questionnaire to question: “Do you believe that your company / organization would be interested in the development of ‘serious games’?”.



**CHART 46** – Comparative (per language of questionnaire) results from the supply side questionnaire to question: “Do you believe that your company / organization would be interested in the development of ‘serious games’?”.



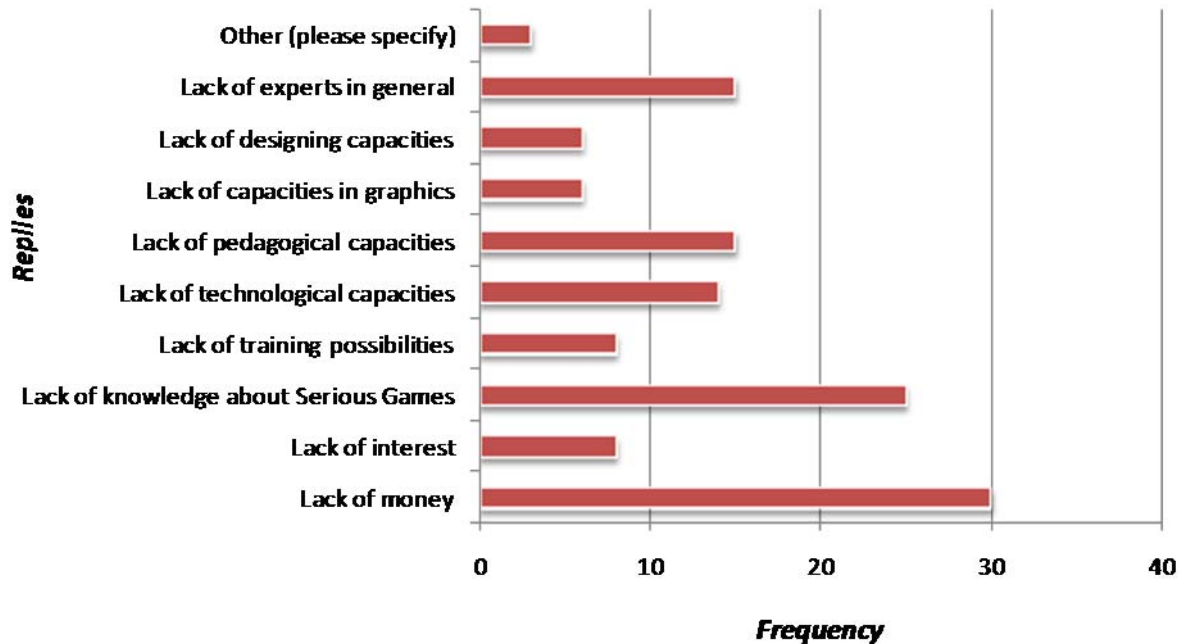
**QUESTION 11** – WHAT DO YOU CONSIDER TO BE THE MAIN OBSTACLES OF BEING INVOLVED IN THE DEVELOPMENT OF SERIOUS GAMES IN YOUR BUSINESS (TICK ALL THAT APPLY)?

**TABLE 28** – Replies received from the supply side questionnaire for question: “What do you consider to be the main obstacles of being involved in the development of ‘serious games’ in your business?”.

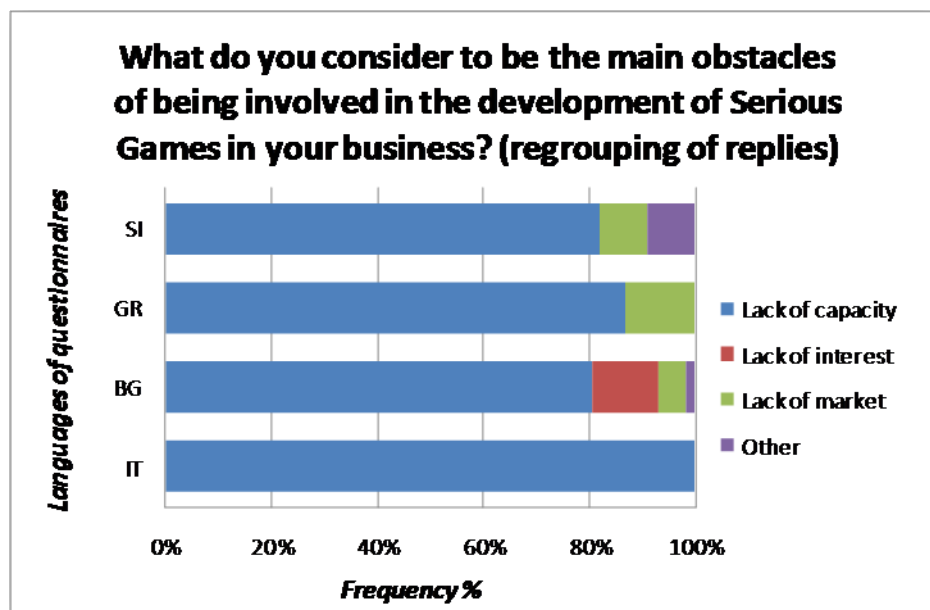
Replies \ Language	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
Lack of money	0	3	15	6	3	1	2	30	23.1
Lack of interest	1	0	7	0	0	0	0	8	6.2
Lack of knowledge about Serious Games	1	2	12	5	4	0	1	25	19.2
Lack of training possibilities	0	0	3	2	1	1	1	8	6.2
Lack of technological capacities	0	1	10	2	0	1	0	14	10.8
Lack of pedagogical capacities	1	1	9	2	1	0	1	15	11.5
Lack of capacities in graphics	0	1	3	1	1	0	0	6	4.6
Lack of designing capacities	0	1	1	1	3	0	0	6	4.6
Lack of experts in general	0	1	11	2	0	1	0	15	11.5
Other (please specify)	0	0	1	0	1	1	0	3	2.3
Total replies	1	3	33	9	6	2	2	56	96.6%
Not replied	1	0	1	0	0	0	0	2	3.4%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	<b>100.0%</b>

**CHART 47** – Aggregate results from the supply side questionnaire to question: “What do you consider to be the main obstacles of being involved in the development of ‘serious games’ in your business?”.

**What do you consider to be the main obstacles of being involved in the development of serious games in your business?**



**CHART 48** – Comparative (per language of questionnaire) results from the supply side questionnaire to question: “What do you consider to be the main obstacles of being involved in the development of ‘serious games’ in your business?”.

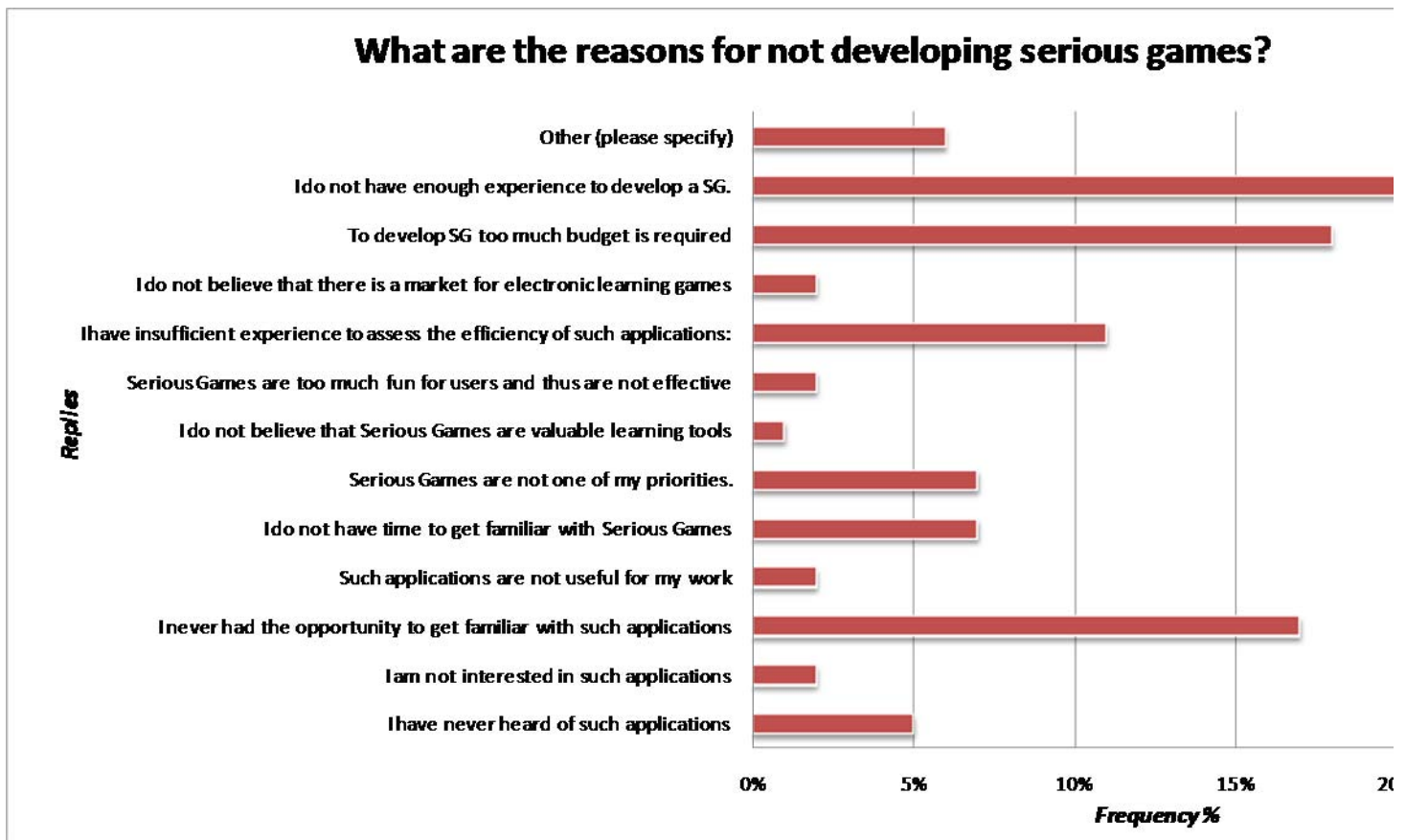


**QUESTION 13 – WHAT ARE THE REASONS FOR NOT DEVELOPING SERIOUS GAMES?**  
**(TICK ALL THAT APPLY):**

**TABLE 29** – Replies received from the supply side questionnaire for question: “What are the reasons for not developing ‘serious games’?”.

Replies \ Language	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
<b>I have never heard of such applications</b>	0	0	5	0	0	0	0	<b>5</b>	5.0
<b>I am not interested in such applications</b>	0	0	2	0	0	0	0	<b>2</b>	2.0
<b>I never had the opportunity to get familiar with such applications</b>	0	0	11	4	2	0	0	<b>17</b>	17.0
<b>Such applications are not useful for my work</b>	0	0	0	1	1	0	0	<b>2</b>	2.0
<b>I do not have time to get familiar with Serious Games</b>	0	2	4	1	0	0	0	<b>7</b>	7.0
<b>Serious Games are not one of my priorities.</b>	0	1	2	1	1	1	1	<b>7</b>	7.0
<b>I do not believe that Serious Games are valuable learning tools</b>	0	0	0	0	1	0	0	<b>1</b>	1.0
<b>Serious Games are too much fun for users and thus are not effective</b>	0	0	2	0	0	0	0	<b>2</b>	2.0
<b>I have insufficient experience to assess the efficiency of such applications:</b>	0	0	7	3	1	0	0	<b>11</b>	11.0
<b>I do not believe that there is a market for electronic learning games</b>	0	0	2	0	0	0	0	<b>2</b>	2.0
<b>To develop SG too much budget is required</b>	0	1	11	4	2	0	0	<b>18</b>	18.0
<b>I do not have enough experience to develop a SG.</b>	1	1	13	4	1	0	0	<b>20</b>	20.0
<b>Other (please specify)</b>	0	1	3	1	1	0	0	<b>6</b>	6.0
<b>Total replies</b>	<b>1</b>	<b>3</b>	<b>34</b>	<b>8</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>54</b>	93.1%
<b>Not replied</b>	1	0	0	1	0	1	1	<b>4</b>	6.9%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

**CHART 49** – Aggregate results from the supply side questionnaire to question: “What are the reasons for not developing ‘serious games’?”.



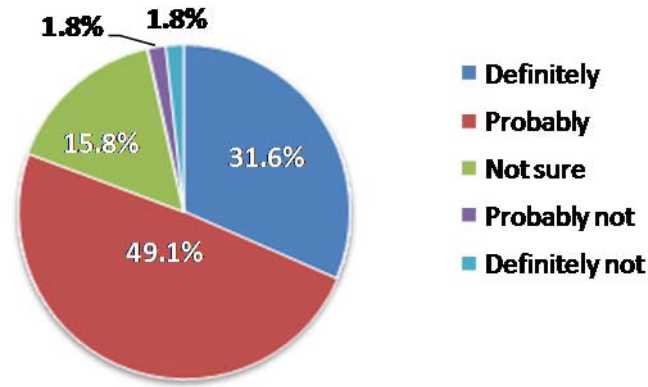
**QUESTION 14** – WOULD YOU BE INTERESTED TO BE INVOLVED IN THE DEVELOPMENT OF SERIOUS GAMES IN THE NEXT 6-12 MONTHS?

**TABLE 30** – Replies received from the supply side questionnaire for question: “Would you be interested to be involved in the development of ‘serious games’ in the next 6-12 months?”.

Language Replies	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
<b>Definitely</b>	0	1	12	3	1	0	1	<b>18</b>	31.6
<b>Probably</b>	1	0	15	6	4	2	0	<b>28</b>	49.1
<b>Not sure</b>	0	1	6	0	1	0	1	<b>9</b>	15.8
<b>Probably not</b>	0	1	0	0	0	0	0	<b>1</b>	1.8
<b>Definitely not</b>	0	0	1	0	0	0	0	<b>1</b>	1.8
Total replies	<b>1</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>57</b>	98.3%
Not replied	1	0	0	0	0	0	0	<b>1</b>	1.7%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

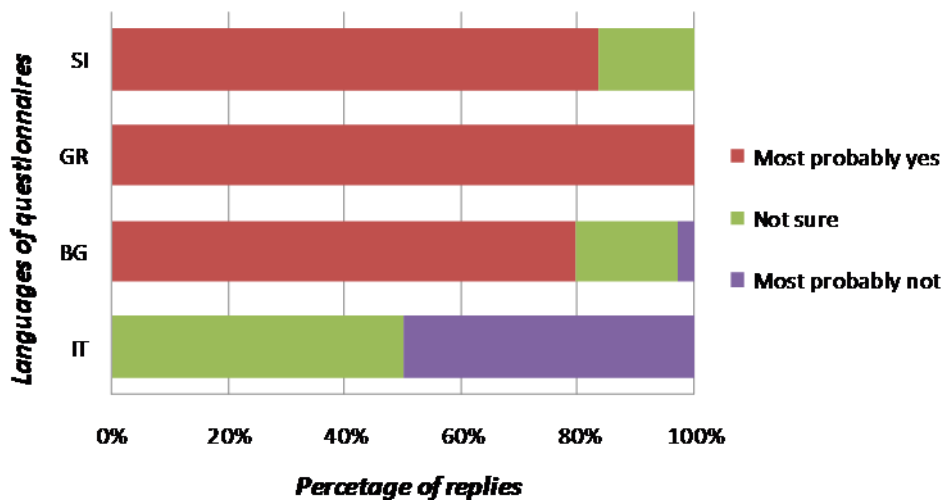
**CHART 50** – Aggregate results from the supply side questionnaire to question: “Would you be interested to be involved in the development of ‘serious games’ in the next 6-12 months?”.

**Would you be interested to be involved in the development of serious games in the next 6-12 months?**



**CHART 51** – Comparative (per language of questionnaire) results from the supply side questionnaire to question: “Would you be interested to be involved in the development of ‘serious games’ in the next 6-12 months?”.

**Would you be interested to be involved in the development of serious games in the next 6-12 months? (regrouping of replies)**



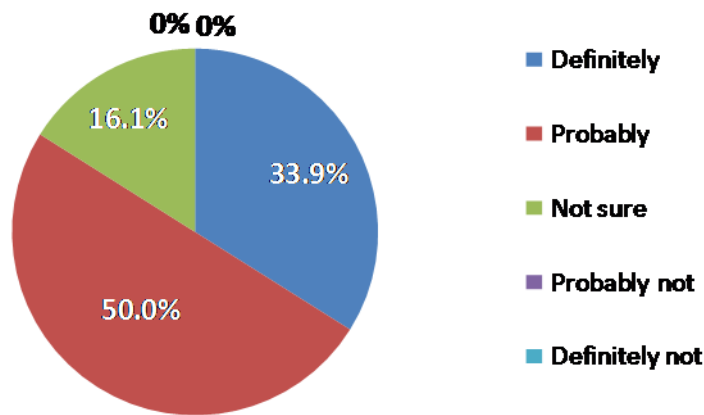
**QUESTION 15 – WOULD YOU BE WILLING TO DEVELOP SERIOUS GAMES IN YOUR ORGANIZATION IN THE FUTURE?**

**TABLE 31** – Replies received from the supply side questionnaire for question: “Would you be willing to develop ‘serious games’ in your organization in the future?”.

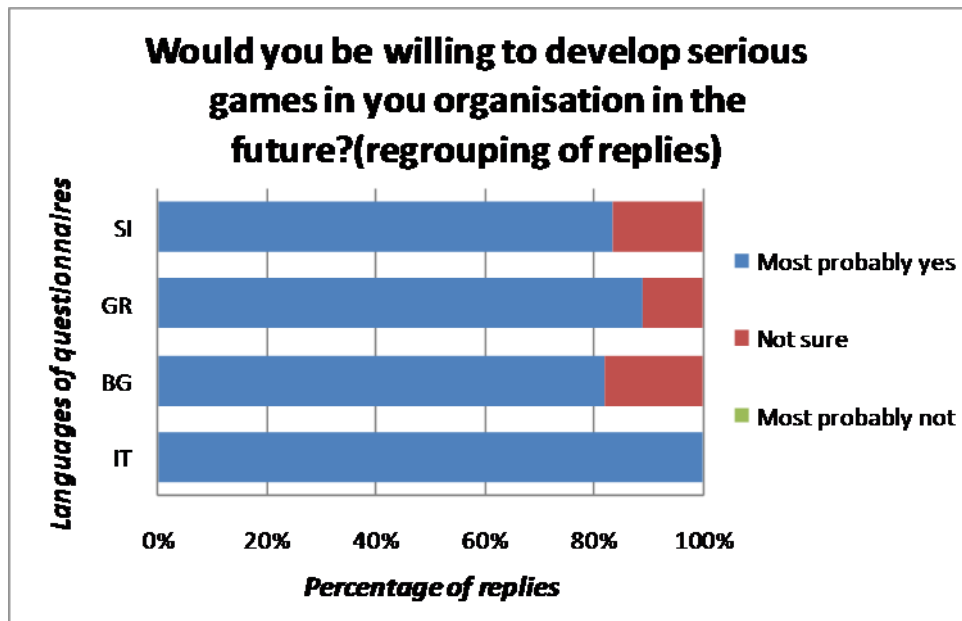
Language Replies	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
<b>Definitely</b>	0	1	12	3	2	0	1	<b>19</b>	33.9
<b>Probably</b>	1	2	15	5	3	2	0	<b>28</b>	50.0
<b>Not sure</b>	0	0	6	1	1	0	1	<b>9</b>	16.1
<b>Probably not</b>	0	0	0	0	0	0	0	<b>0</b>	0.0
<b>Definitely not</b>	0	0	0	0	0	0	0	<b>0</b>	0.0
Total replies	<b>1</b>	<b>3</b>	<b>33</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>56</b>	96.6%
Not replied	1	0	1	0	0	0	0	<b>2</b>	3.4%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

**CHART 52** – Aggregate results from the supply side questionnaire to question: “Would you be willing to develop ‘serious games’ in your organization in the future?”.

**Would you be willing to develop serious games in your organisation in the future?**



**CHART 53** – Comparative (per language of questionnaire) results from the supply side questionnaire to question: “Would you be willing to develop ‘serious games’ in your organization in the future?”.



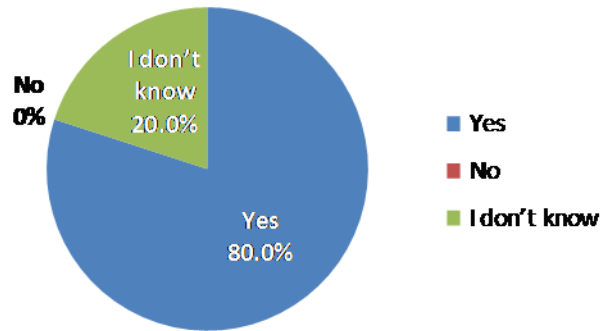
**QUESTION 16** – DO YOU CONSIDER THE MARKET FOR SERIOUS GAMES AS AN INTERESTING FIELD WITH FUTURE POTENTIAL AND WORTH INVESTING IN?

**TABLE 32** – Replies received from the supply side questionnaire for question: “Do you consider the market for ‘serious games’ as an interesting field with future potential and worth investing in?”.

Language Replies	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
<b>Yes</b>	1	2	25	8	5	1	2	<b>44</b>	80.0
<b>No</b>	0	0	0	0	0	0	0	<b>0</b>	0.0
<b>I don't know</b>	0	1	9	1	0	0	0	<b>11</b>	20.0
Total replies	<b>1</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>55</b>	94.8%
Not replied	1	0	0	0	1	1	0	<b>3</b>	5.2%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

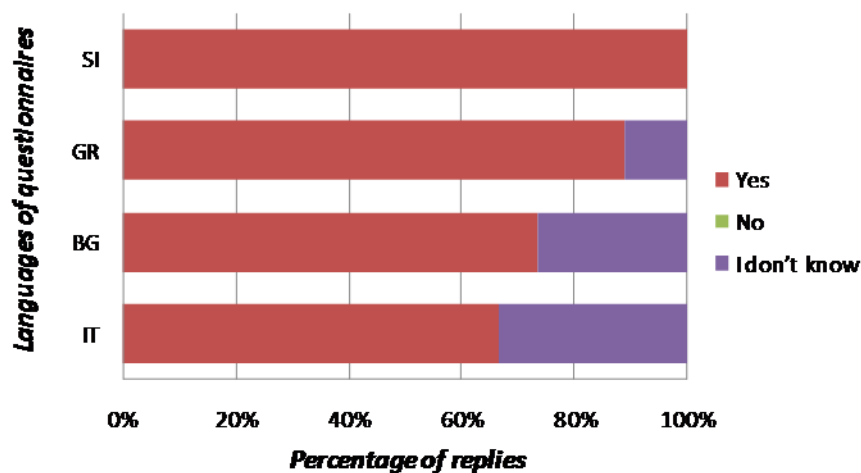
**CHART 54** – Aggregate results from the supply side questionnaire to question: “Do you consider the market for ‘serious games’ as an interesting field with future potential and worth investing in?”.

**Do you consider the market for serious games as an interesting field with future potential and worth investing in?**



**CHART 55** – Comparative (per language of questionnaire) results from the supply side questionnaire to question: “Do you consider the market for ‘serious games’ as an interesting field with future potential and worth investing in?”.

**Do you consider the market for serious games as an interesting field with future potential and worth investing in?**

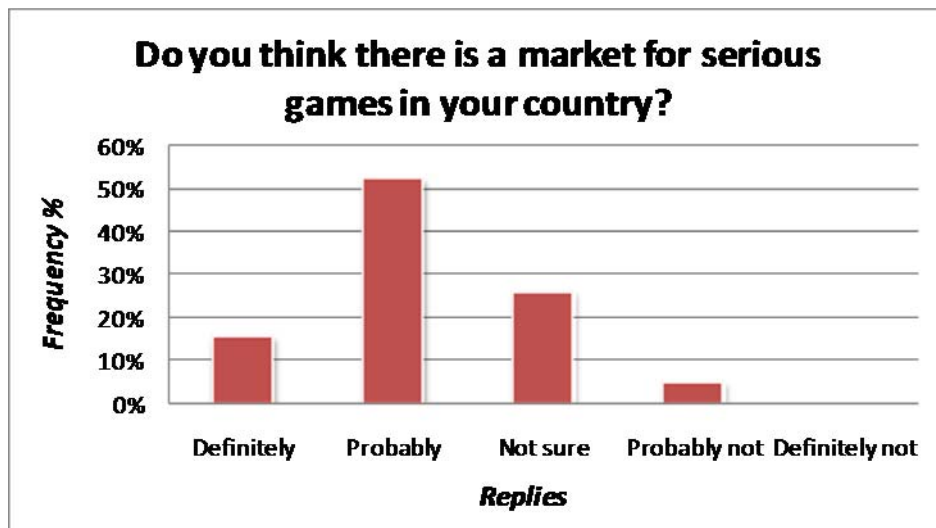


**QUESTION 17 – DO YOU THINK THERE IS A MARKET FOR SERIOUS GAMES IN YOUR COUNTRY?**

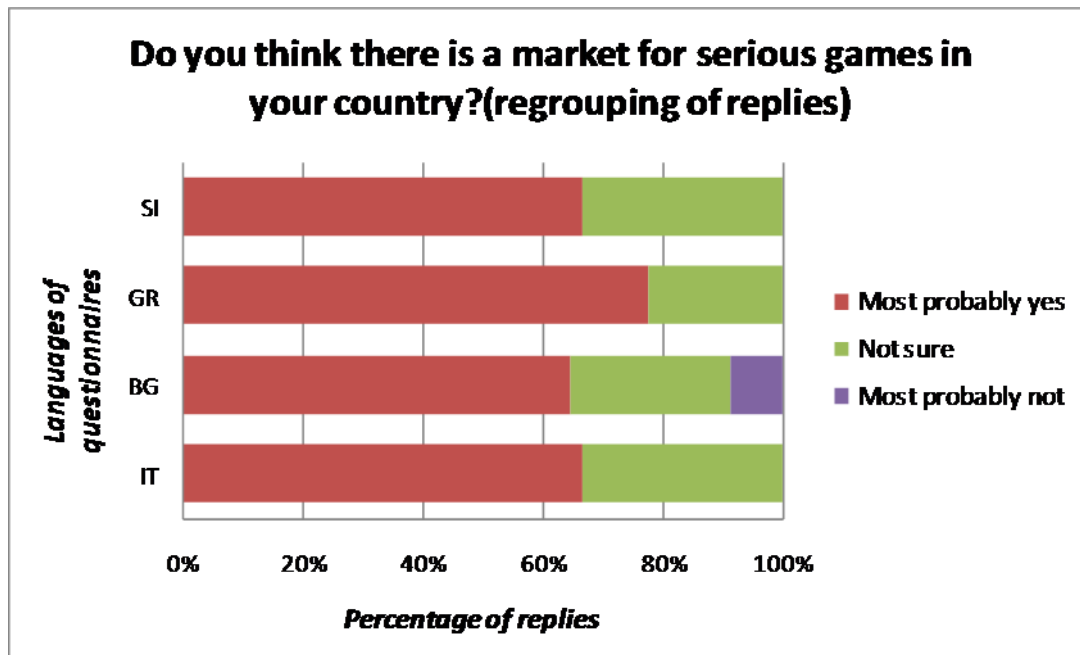
**TABLE 33** – Replies received from the supply side questionnaire for question: “Do you think there is a market for ‘serious games’ in your country?”.

Language Replies	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
<b>Definitely</b>	0	0	6	2	0	0	1	<b>9</b>	15.8
<b>Probably</b>	1	2	16	5	4	1	1	<b>30</b>	52.6
<b>Not sure</b>	0	1	9	2	2	1	0	<b>15</b>	26.3
<b>Probably not</b>	0	0	3	0	0	0	0	<b>3</b>	5.3
<b>Definitely not</b>	0	0	0	0	0	0	0	<b>0</b>	0.0
Total replies	<b>1</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>57</b>	98.3%
Not replied	1	0	0	0	0	0	0	<b>1</b>	1.7%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

**CHART 56** – Aggregate results from the supply side questionnaire to question: “Do you think there is a market for ‘serious games’ in your country?”.



**CHART 57** – Comparative (per language of questionnaire) results from the supply side questionnaire to question: “Do you think there is a market for ‘serious games’ in your country?”.



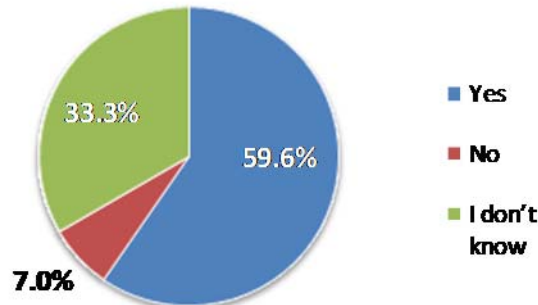
**QUESTION 18** – DO YOU THINK THAT YOUR STAFF / COLLEAGUES / SUPERIORS WOULD BE INTERESTED IN DEVELOPING SERIOUS GAMES FOR VOCATIONAL TRAINING?

**TABLE 34** – Replies received from the supply side questionnaire for question: “Do you think that your staff / colleagues / superiors would be interested in developing ‘serious games’ for vocational training?”.

Language \ Replies	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
<b>Yes</b>	1	2	18	6	3	2	2	<b>34</b>	59.6
<b>No</b>	0	0	3	1	0	0	0	<b>4</b>	7.0
<b>I don't know</b>	0	1	13	2	3	0	0	<b>19</b>	33.3
Total replies	<b>1</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>57</b>	98.3%
Not replied	1	0	0	0	0	0	0	<b>1</b>	1.7%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

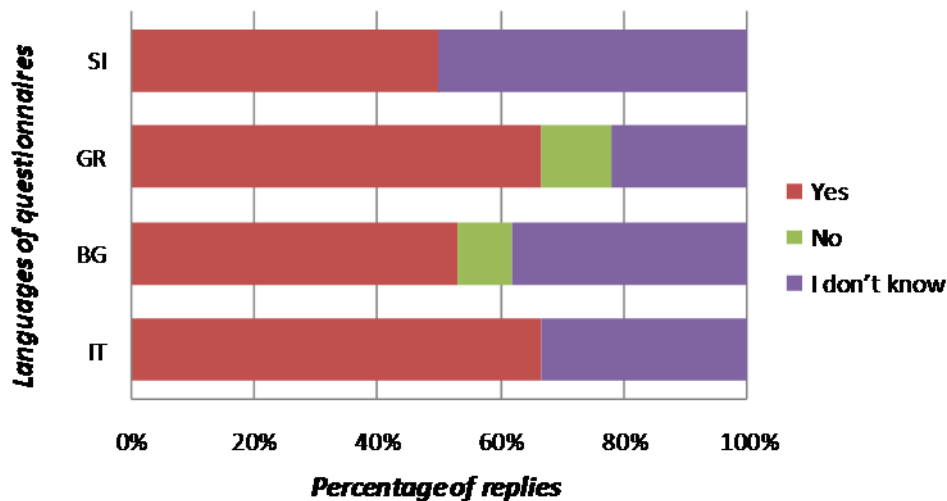
**CHART 58** – Aggregate results from the supply side questionnaire to question: “Do you think that your staff / colleagues / superiors would be interested in developing ‘serious games’ for vocational training?”.

**Do you think that your staff / colleagues / superiors would be interested in developing serious games for vocational training?**



**CHART 59** – Comparative (per language of questionnaire) results from the supply side questionnaire to question: “Do you think that your staff / colleagues / superiors would be interested in developing ‘serious games’ for vocational training?”.

**Do you think that your staff / colleagues / superiors would be interested in developing serious games for vocational training?**



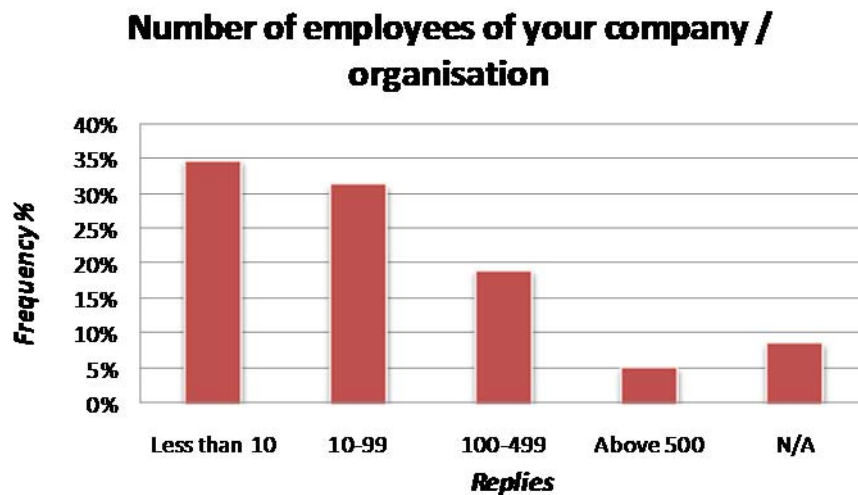
**QUESTION 19 – NUMBER OF EMPLOYEES OF YOUR COMPANY / ORGANIZATION**

**TABLE 35** – Replies received from the supply side questionnaire for question: “Number of employees of your company / organization”.

Language	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
Replies									

<b>Less than 10</b>	0	0	10	5	4	0	1	<b>20</b>	35.1
<b>10-99</b>	0	3	8	3	1	2	1	<b>18</b>	31.6
<b>100-499</b>	1	0	8	1	1	0	0	<b>11</b>	19.3
<b>Above 500</b>	0	0	3	0	0	0	0	<b>3</b>	5.3
<b>N/A</b>	0	0	5	0	0	0	0	<b>5</b>	8.8
Total replies	<b>1</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>57</b>	98.3%
Not replied	1	0	0	0	0	0	0	<b>1</b>	1.7%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

**CHART 60** – Aggregate results from the supply side questionnaire to question: “Number of employees of your company / organization”.

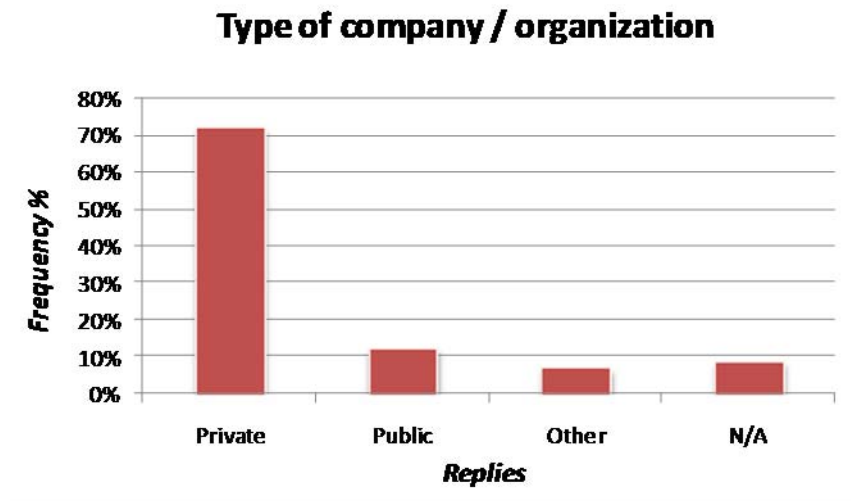


### QUESTION 20 – TYPE OF COMPANY / ORGANIZATION

**TABLE 36** – Replies received from the supply side questionnaire for question: “Type of company / organization”.

Language	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
Replies									
<b>Private</b>	1	1	23	9	4	2	1	<b>41</b>	71.9
<b>Public</b>	0	2	3	0	2	0	0	<b>7</b>	12.3
<b>Other</b>	0	0	3	0	0	0	1	<b>4</b>	7.0
<b>N/A</b>	0	0	5	0	0	0	0	<b>5</b>	8.8
Total replies	<b>1</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>57</b>	98.3%
Not replied	1	0	0	0	0	0	0	<b>1</b>	1.7%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

**CHART 61** – Aggregate results from the supply side questionnaire to question: “Type of company / organization”.

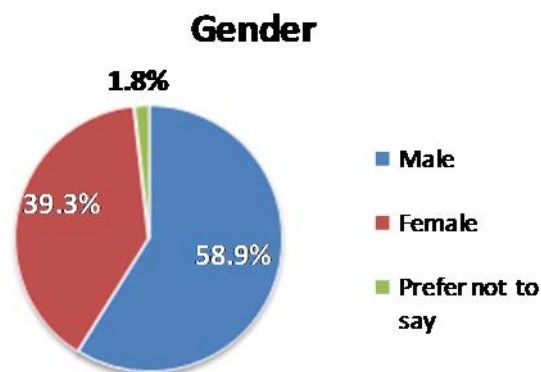


**QUESTION 21 – GENDER**

**TABLE 37** – Replies received from the supply side questionnaire for question: “Gender”.

Language Replies	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
<b>Male</b>	0	2	15	8	5	1	2	<b>33</b>	58.9
<b>Female</b>	1	1	17	1	1	1	0	<b>22</b>	39.3
<b>Prefer not to say</b>	0	0	1	0	0	0	0	<b>1</b>	1.8
Total replies	<b>1</b>	<b>3</b>	<b>33</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>56</b>	96.6%
Not replied	1	0	1	0	0	0	0	<b>2</b>	3.4%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

**CHART 62** – Aggregate results from the supply side questionnaire to question: “Gender”.

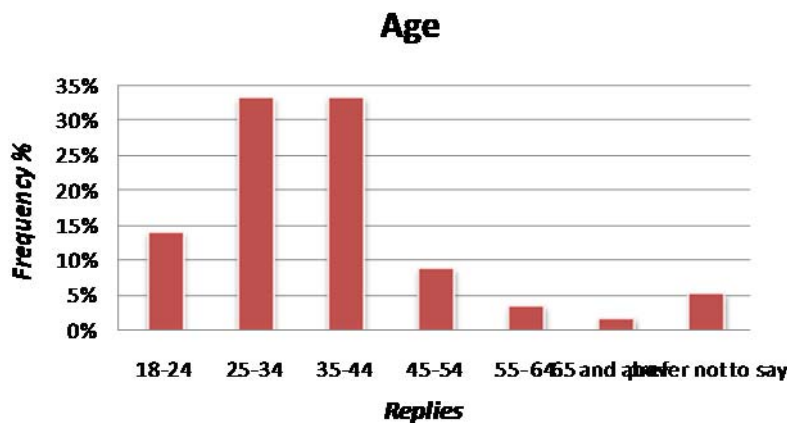


**QUESTION 22 – AGE**

**TABLE 38** – Replies received from the supply side questionnaire for question: “Age”.

Language Replies	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
<b>18-24</b>	0	0	7	0	0	1	0	<b>8</b>	14.0
<b>25-34</b>	1	1	8	5	3	1	0	<b>19</b>	33.3
<b>35-44</b>	0	2	10	4	2	0	1	<b>19</b>	33.3
<b>45-54</b>	0	0	5	0	0	0	0	<b>5</b>	8.8
<b>55- 64</b>	0	0	0	0	1	0	1	<b>2</b>	3.5
<b>65 and above</b>	0	0	1	0	0	0	0	<b>1</b>	1.8
<b>prefer not to say</b>	0	0	3	0	0	0	0	<b>3</b>	5.3
Total replies	<b>1</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>57</b>	98.3%
Not replied	1	0	0	0	0	0	0	<b>1</b>	1.7%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

**CHART 63** – Aggregate results from the supply side questionnaire to question: “Age”.



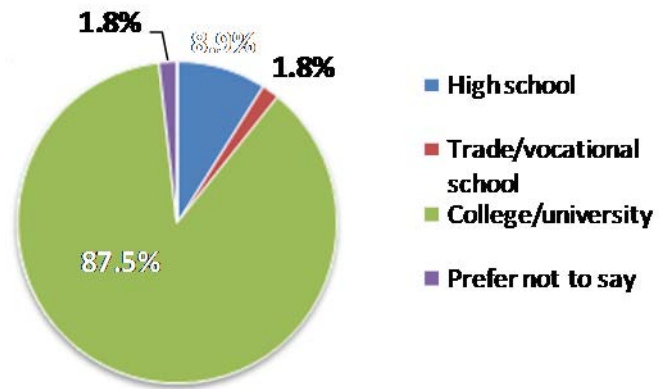
## QUESTION 23 – EDUCATION

**TABLE 39** – Replies received from the supply side questionnaire for question: “Education”.

Language Replies	UK	IT	BG	GR	SI	HU	RO	TOTAL	%
<b>High school</b>	0	0	5	0	0	0	0	<b>5</b>	8.9
<b>trade/vocational school</b>	0	0	0	1	0	0	0	<b>1</b>	1.8
<b>college/university</b>	1	3	28	8	5	2	2	<b>49</b>	87.5
<b>prefer not to say</b>	0	0	0	0	1	0	0	<b>1</b>	1.8
Total replies	<b>1</b>	<b>3</b>	<b>33</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>56</b>	96.6%
Not replied	1	0	1	0	0	0	0	<b>2</b>	3.4%
<b>TOTAL</b>	<b>2</b>	<b>3</b>	<b>34</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>58</b>	100.0%

**CHART 64** – Aggregate results from the supply side questionnaire to question: “Education”.

## Education



## 5. ANALYSIS OF FINDINGS

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### 5.1 Potential users of serious games

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We present in this section the main findings from the analysis of the data gathered by the ‘demand side’ questionnaire.

#### 5.1.1 Demographics of the respondents

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##### Sample size

One hundred and fifty eight (**158**) people filled in the ‘Demand side’ questionnaire.

##### Gender / Age / Education

- **62,3% of the responders were female**, while the remaining 37% were male and 1 responder (0,6%) preferred not to declare gender.
- The most represented groups were the **25-34 age group with 46,5%** and the **35-44 age group with 27,1%**. The remaining 26,4% spread relatively balanced to the remaining age groups as can be seen in Table 17.
- The vast majority of the responders (90%) had at least a **college/university level education**.

##### Professional background

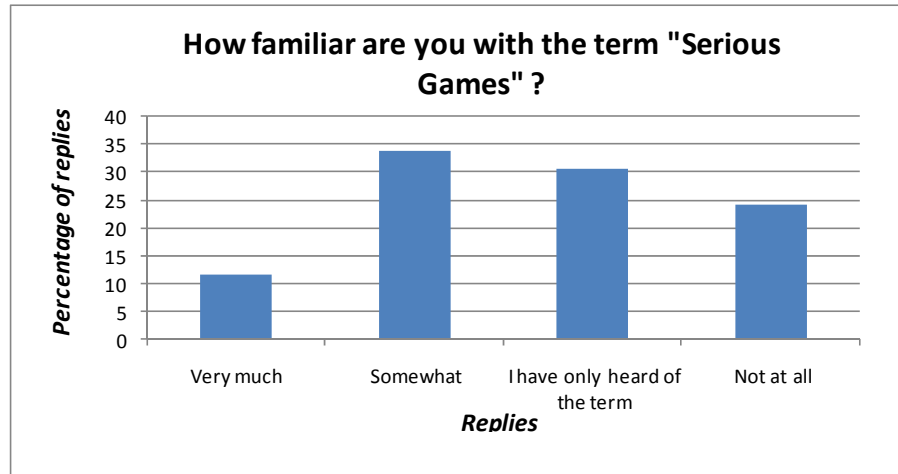
Close to one third of the responders (28,7%) belonged to the “**Human Resources**” sector and close to one fifth (18,5%) in the “**Business / Management**” and close to another one fifth (17,8%) best described their background as the “**Education**” sector. Out of the remaining 35 percent of the responders, 12,7% belonged in categories not foreseen (“Other”) while 9,6% belonged in the ICT sector, 6,4% were researchers, 4,5% belonged in the “Art / Graphics design” sector and 1,9% in “Health”.

##### Gamers vs non-gamers

Four out of ten of the responders (**40,1%**) **enjoy or greatly enjoy playing videogames**, unlike approximately three out of ten (**31,8%**) **who rather or completely dislike playing videogames**. A remaining 24,2% neither like nor dislike playing videogames.

### 5.1.2 Familiarity with serious games and use of serious game applications

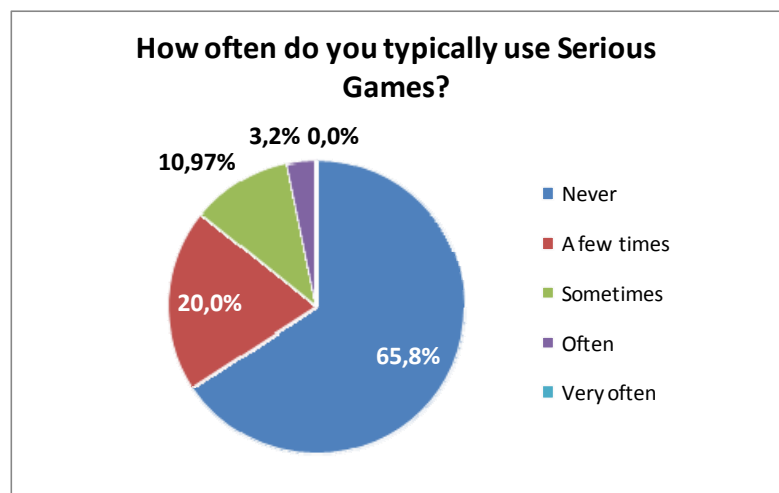
In terms of familiarity, respondents seem to be split into two rather equally sized groups. **54,8% of them have either only heard of the term “Serious Games” or has not heard of it at all**, while the remaining **45,3% is somewhat or very much familiar with the term**. A more detailed distribution can be seen in the corresponding graph.

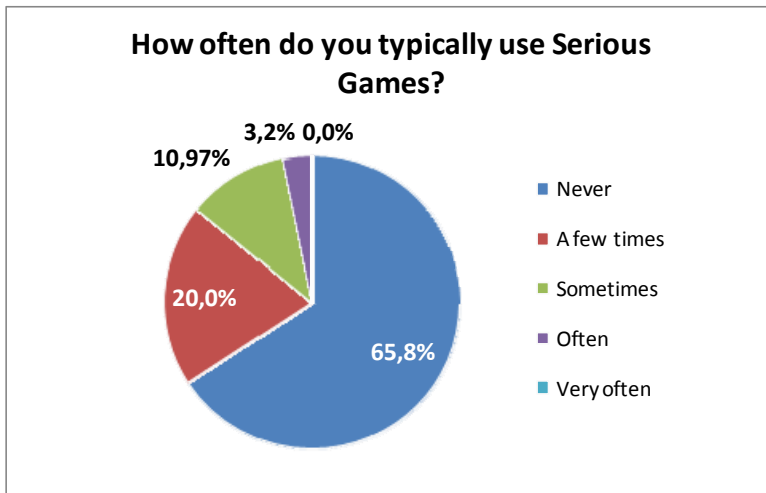


**Familiarity with the terms “Serious Games” and “Game based learning” appears to be increasing with time**, as only 10,8% of the respondents had heard of the terms over 3 years ago, while 26,8% has heard of the terms for the first time in the period from 1 to 3 years ago, and the percentage rises to 40,8% for those that first heard of these terms in the past 12 months.

Information about what serious games are seems to have been drawn by the respondents from a variety of sources. **The majority (47,6%) has learned the term in some typical setting such as the work environment, during their studies or at conferences**. An important part (27,2%) has been informed from the internet. Only a small part (4,5%) of the respondents has learned of serious games from the media.

**Familiarity with actual serious gaming applications appears to be very low**, as 43,9% of the respondents do not know of any serious game application (even though those that do not know the term are only 24,2% of the total), while another resounding 48,4% know only of 1-5 serious game applications. It is only 5,8% of the respondents that can name 5-10 applications and a mere 1,9% that can name more than 10 serious games. **Two out of three respondents (65,8%) have never used a serious game application** and none of them is a very frequent user. One out of three (34,2%) respondents have occasionally used or often uses serious games.

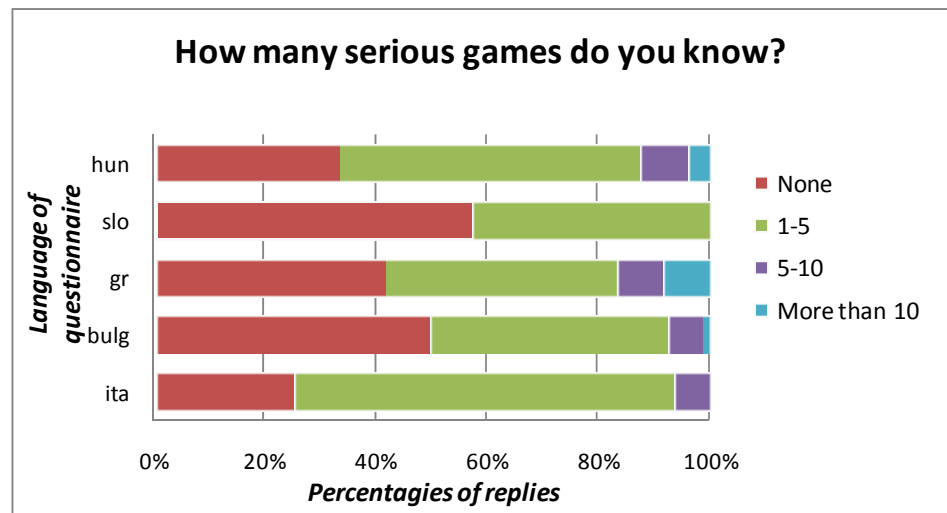




Some further comments can be made regarding the **difference in the familiarity with serious games between the respondents of the different countries**. We exclude the questionnaires that correspond to the English and Romanian version of the questionnaires as the number of respondents was comparatively much lower than those deriving from the other countries.

Looking at the breakdown of percentages and as can be seen in the two most indicative accompanying graphs, it appears that

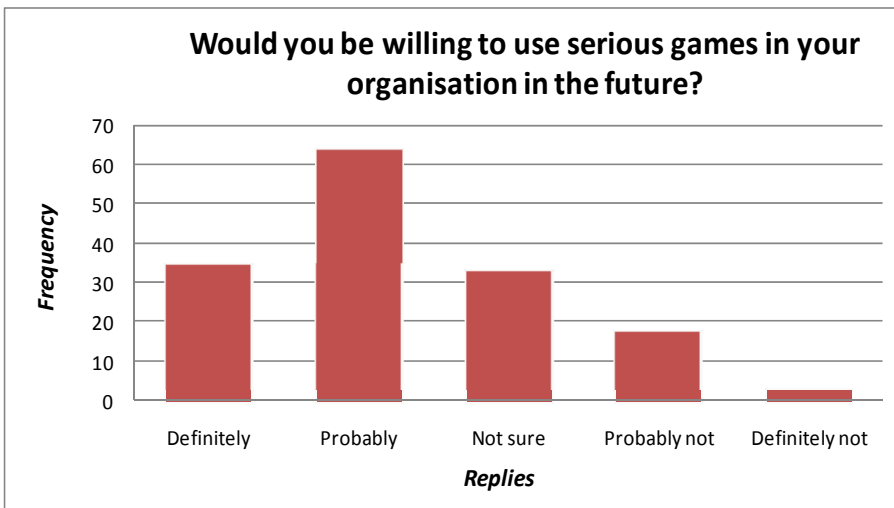
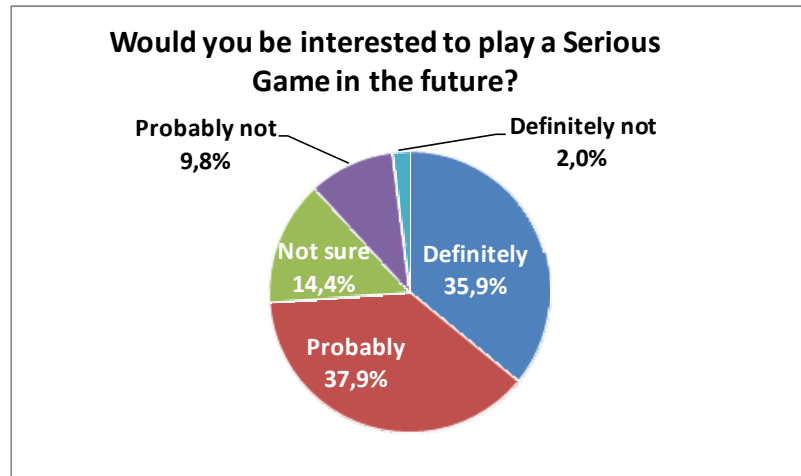
**Italy has the lead**, as Italian responders have long heard of the terms “serious games” & “game based learning” and also have a greater percentage of people who know of particular serious gaming applications. **The most recently made aware of the term of serious games and relevant applications seem to be Slovenians and Bulgarians**, while **Greeks and Hungarians seem to lie somewhere in the middle**.



It is interesting to notice that even though the respondents from Greece and Hungary as not as early adopters as Italians, still they appear to have the greatest percentages of people who know of many serious gaming applications, an indication perhaps that those percentages of the population have a greater intensity of involvement in the field.

### 5.1.3 Interest and readiness to use serious games

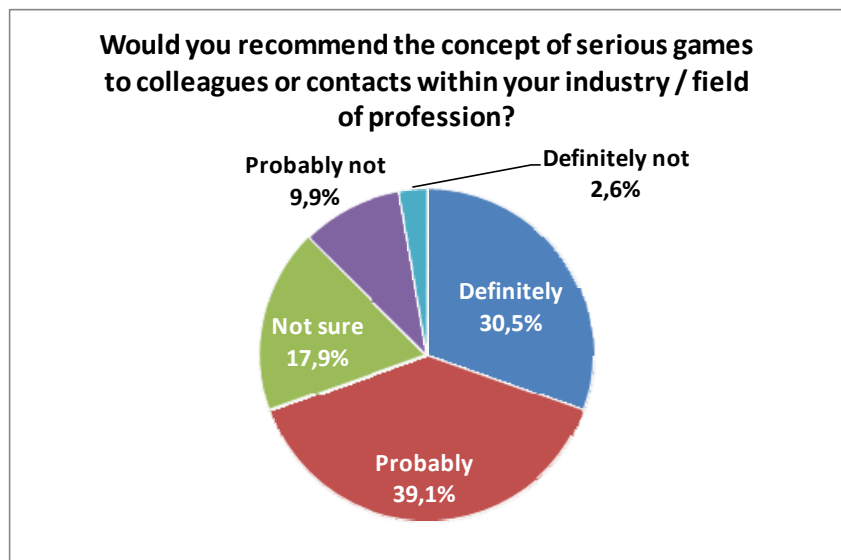
Amongst the ‘Demand side’ respondents of the LUDUS survey, **there is a great deal of interest and a high level of readiness regarding the possibility of using serious games.** More specifically, approximately **seven out of ten (73,8%)** of the respondents replied that they would be **definitely or probably interested in playing a serious game in the future**, 14,4% was unsure and only one out of ten



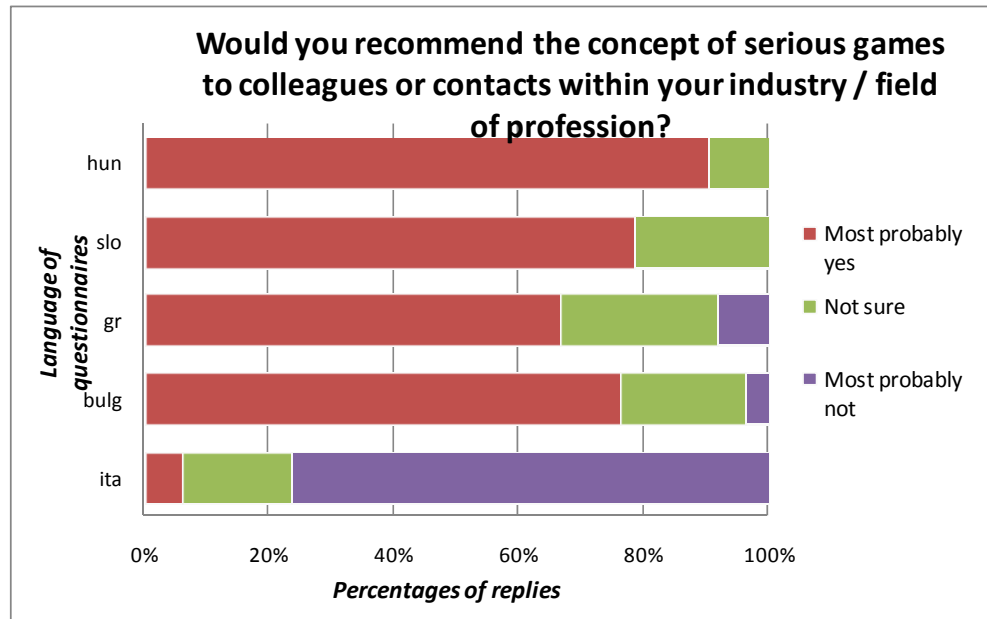
(11,8%) replied that they would probably or definitely not be interested in playing a serious game.

This result is confirmed by the matching percentages of replies in terms of the willingness that respondents declared in using serious games in their organizations in the future. In the same analogy, respondents appear willing

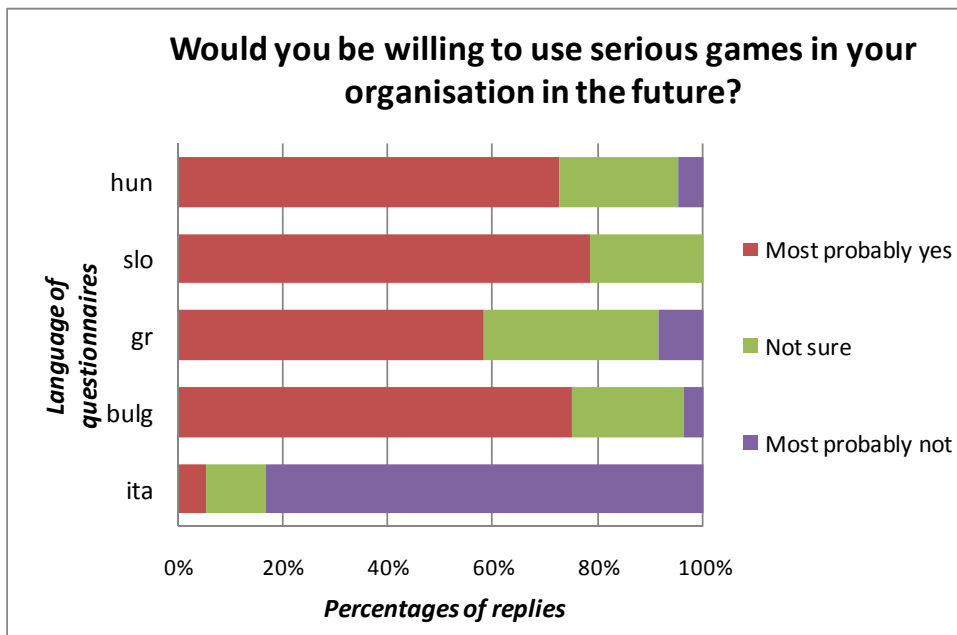
to recommend the concept of serious games to colleagues or contacts within their field of profession.



There is an impressive differentiation in replies between the respondents from Italy and other countries in terms of readiness to use serious games. Although, we previously noted how Italians are the ones earliest informed on serious games, **Italians at**



**the same time appear to be the ones least willing to use serious games in their organizations or to recommend their use to their colleagues and people in their field of profession.** A greater enthusiasm can perhaps be observed for the most recently informed respondents. Those from

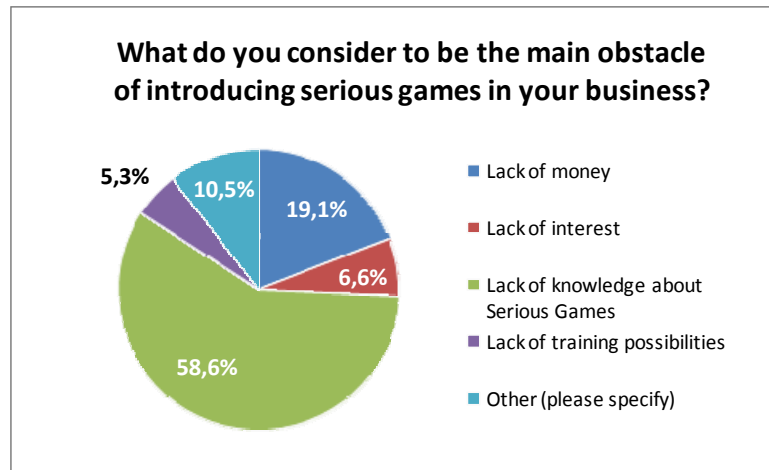


**Slovenia and Bulgaria together with those from Hungary, appear very willing to try and to recommend the use of serious games.** Greece follows closely, with also some very high percentages of respondents that wish to use serious games in their organizations, but also with many people still unsure.

#### 5.1.4 Possibilities and factors for the inclusion of serious games in organisations

The majority of respondents (41,8%) is unsure of whether serious games are likely to be used in their own organisations, closely followed by those (39,2%) that consider it likely. Approximately two out of ten (19%) consider it rather unlikely that serious games will be used in their organisations in the future.

The most important obstacle in introducing serious games to their organisations proved to be the lack of knowledge (58,6%). Lack of money came in second place (19,1%). It is interesting to note how lack of interest and lack of training possibilities proved to be rather less important obstacles, summing up at 11,9%.



On a personal level, unfamiliarity of respondents with serious games appears to be the most important reason for not using them. It is also interesting to note, how although respondents are to an important degree unfamiliar with serious games, still, they already have to a significant level the conviction that an important reason for not using serious games is that they are expensive (as can be seen in the previous section where the results of question 15 are presented).

## 5.2 Developers of serious games

We present in this section the main findings from the analysis of the data gathered by the ‘supply side’ questionnaire.

### 5.2.1 Demographics of the respondents

#### Sample size

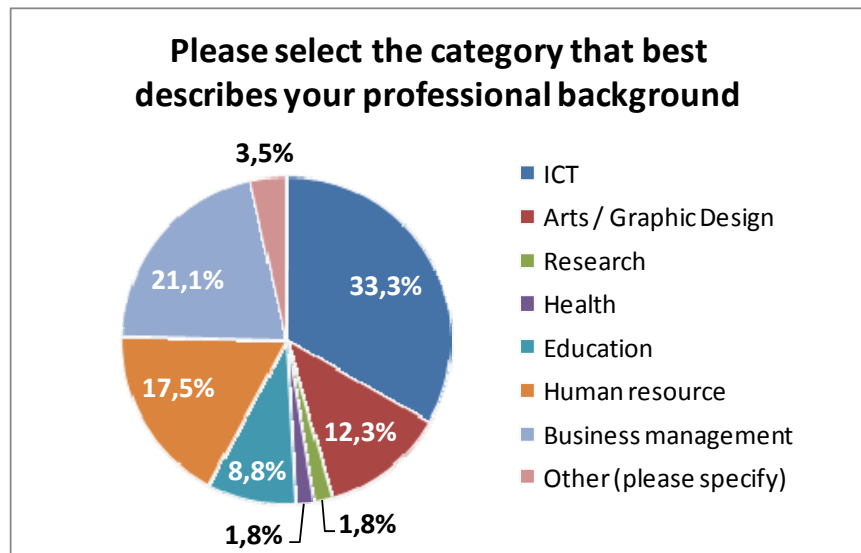
Fifty eight (58) people filled in the ‘Supply side’ questionnaire.

#### Gender / Age / Education

- **39,3% of the responders were female**, while the remaining 58,9% were male and 1 responder (1,8%) preferred not to declare gender.
- The most represented groups were the **25-34 and 35-44 age groups with 33,35% each**. The remaining 33,4% spread relatively balanced to the remaining age groups as can be seen in Table 40.
- The vast majority of the responders (87,5%) had at least a **college/university level education**.

#### Professional background

One third of the responders (33,3%) belonged to the “ICT” sector and close to one fifth (21,1%) in the “**Business / Management**” and close to another one fifth (17,5%) best described their background as the “**Human Resource Management**” sector. An important 12,3% had a background in “**Arts/Graphic Design**”.

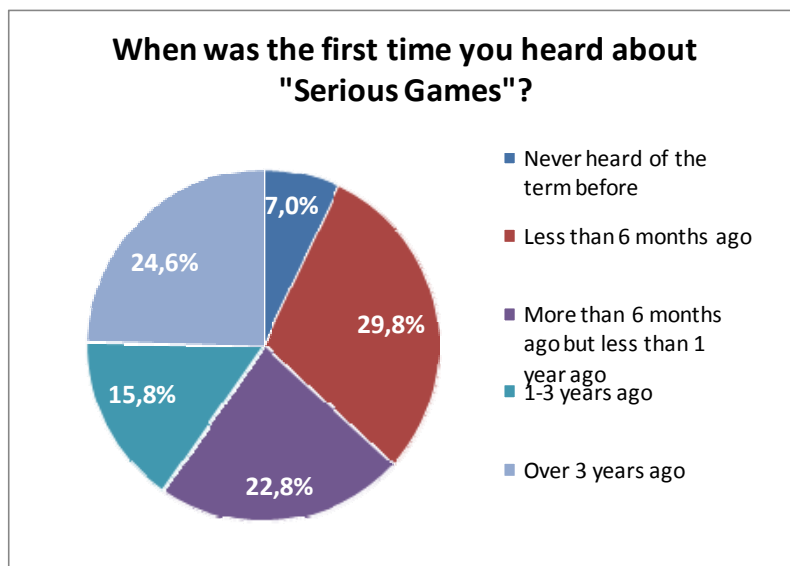
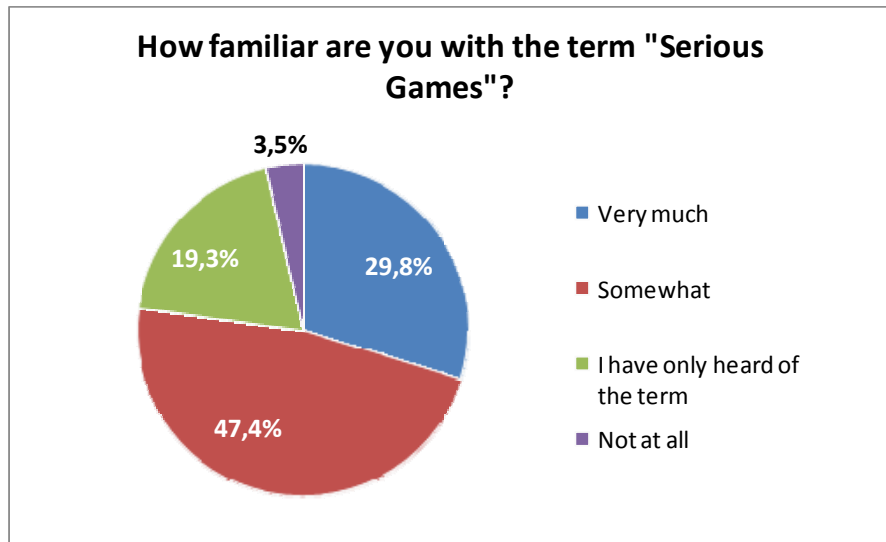


#### **The sample of the LUDUS**

**survey represented organisations of all sizes in a very balanced way** with 35,1% being small organisations (less than 10 employees), another 31,6% being medium sized (10-99 employees) and 24,6% in large organisations (over 100 employees). **The majority of the organisations of the respondents of the ‘supply side’ questionnaire, belonged to the private sector (71,9%).**

## 5.2.2 Familiarity with serious games and development of serious game applications

In terms of familiarity, respondents seem to be quite familiar with the term “Serious Games”, as 29,8% of them replied they are very familiar, while another 47,4% replied that they are quite familiar with the term. It was only 22,8% that was unfamiliar with the term “Serious Games”. A more detailed distribution can be seen in the corresponding graph.



**Familiarity with the terms “Serious Games” and “Game based learning” appears to have increased significantly in the last year**, as 52,6% of the respondents first heard of the term in the past 12 months. Another 15,8% first heard of the term 1-3 years ago, while 24,6% of the respondents had already heard of the term over 3 years ago.

Information about what serious games are seems to have been drawn by the respondents from a variety of sources. **The majority**

**(56,6%) has learned the term in some typical setting such as the work environment, during their studies or at conferences.** An important part (28,9%) has been informed from the internet. Only a small part (3,9%) of the respondents has learned of serious games from the media.

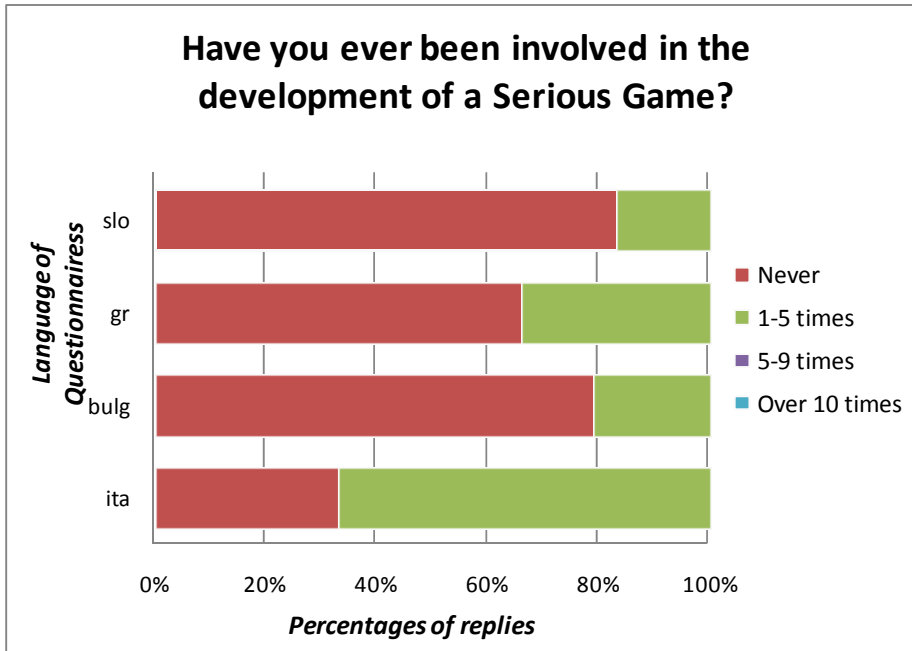
**Familiarity with actual serious gaming applications appears to be relatively high**, as 59,6% of the respondents know 1-5 serious game application, while another resounding 19,3% know of more than 5 serious game applications. It is only 21,1% of the respondents that cannot name any serious games at all.

**The vast majority of respondents (71,9%) has never been involved in the development of a serious game application** and only 1,8% of them have significant experience (having been involved in over 10 serious game development projects). **An important percentage of**

respondents (26,3%) has some limited experience by having participated in the development of 1-5 serious games. is a very frequent user. One out of three (34,2%) respondents have occasionally used or often uses serious games.

Some further comments can be made regarding the **difference in the familiarity with serious**

**games between the respondents of the different countries.** We exclude the questionnaires that correspond to the English and Romanian version of the questionnaires as the number of respondents was comparatively much lower than those deriving from the other countries.

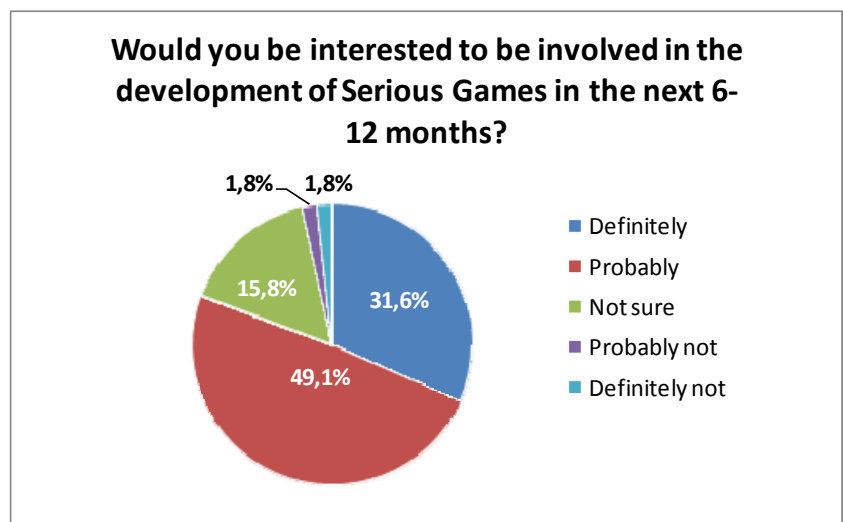


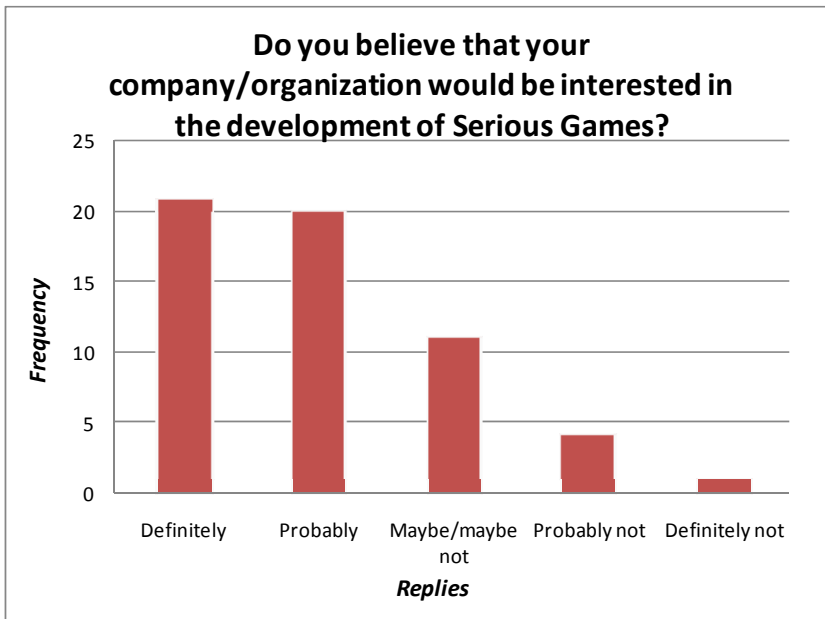
Looking at the breakdown of percentages, it appears that **Italy has the lead**, as Italian responders have

more experience in developing serious games, with the rest of the countries represented in the survey following at a distance.

### 5.2.3 Interest and readiness to develop serious games

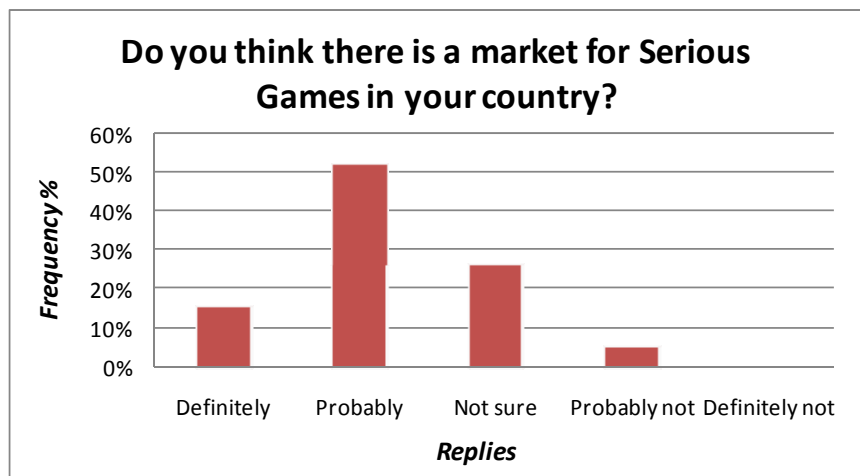
The vast majority of respondents (91,1%) believe that serious games can be an effective learning method for adults, thus expressing an interest in the field. This interest is further confirmed by the high percentage of respondents (87,5%) that would be willing to recommend the concept of serious games to colleagues or contacts within their field of profession.





Similarly high percentages of the ‘supply side survey’ participants (80,7%) declare **definitely or probably interested to be involved in the development of Serious Games** in the next 6-12 months and 71,9% believe that development of Serious Games **would be something of interest also to the organisation** to which they belong. Taking also into account how 59,6% of the

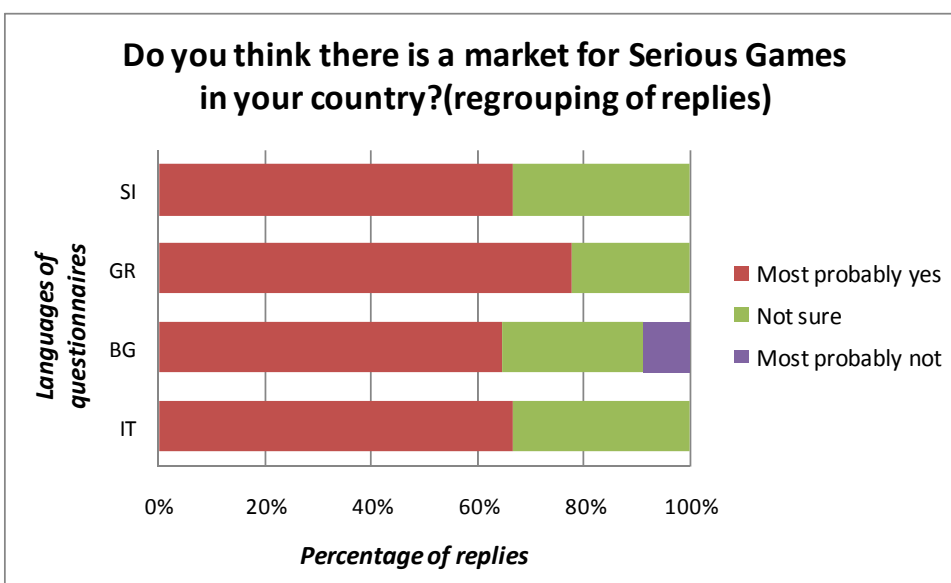
respondents believe that their colleagues would also be interested in developing Serious Games, we can assume that **the ‘supply side’ appears to have significantly more ready than the ‘demand side’**.



Investigating a bit further, we see that perhaps a reason for this higher level of readiness is that the **‘supply side’**

**respondents have a high expectation for a market for Serious Games** – with 80% of them

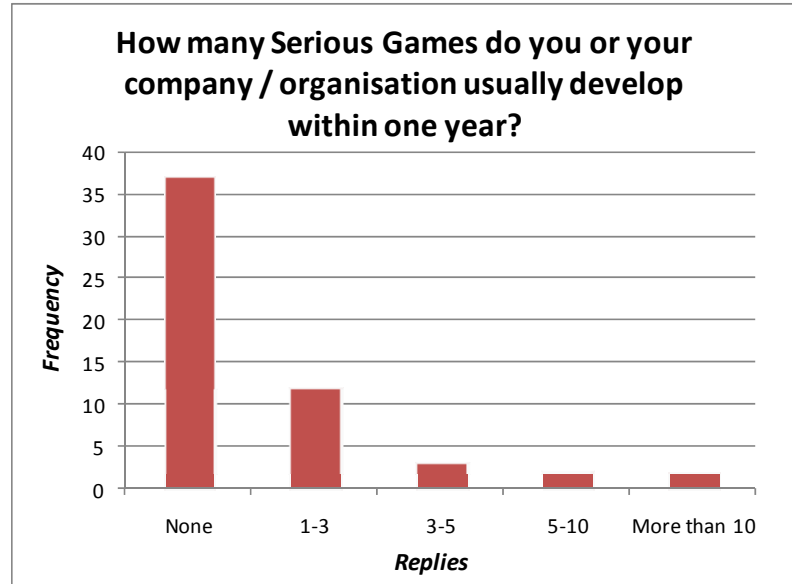
considering the market for Serious Games as having a worthy future potential for investments. As can be seen in the corresponding graphs, it appears that **they place this market mostly outside of the South East Europe area**, as percentages for the same question investigating the potential of the market



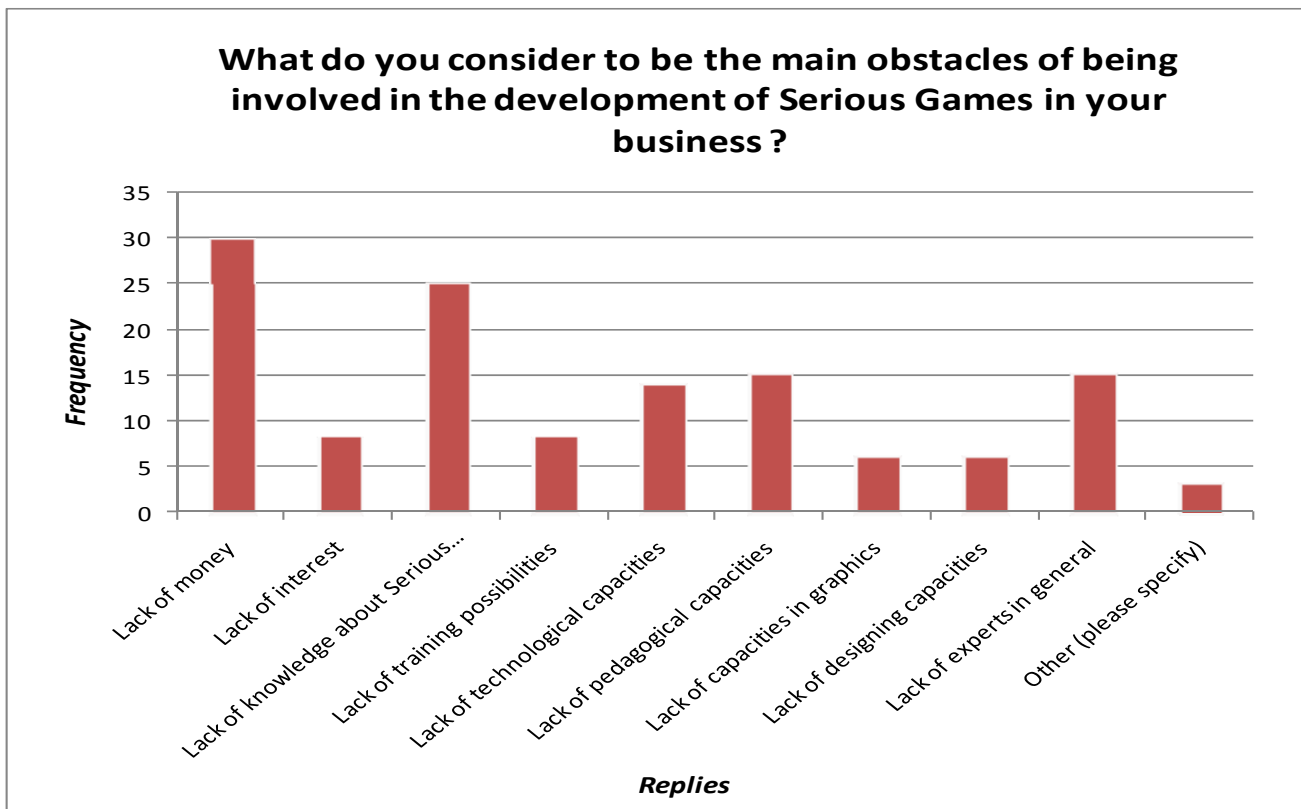
in their own countries (close to 65%) are lower than when considering the entire market.

## 5.2.4 Capabilities and factors influencing the development of serious games

Most of the respondents (66,1%) to the ‘supply side’ questionnaire are currently in an organisation that does not produce Serious Games. A significant 21,4% of the respondents’ organisations produce 1-3 Serious Games each year, while 12,6% of the respondents’ organisations produce more than 3 Serious Games each year. Results vary greatly depending on the country of the respondents with Italy having a clear lead, Slovenia following in second place and Greece and Bulgaria lagging behind, demonstrating only few examples of organisations that produce Serious Games.



The most frequently reported (35%) reason why organisations of respondents are not producing serious gaming applications is the lack of familiarity and of experience in



developing such applications. The second most frequent (18%) reason is their belief that serious games development requires very high budgets, and the third most frequently reported (11%) reason appears to be insufficient experience to assess the efficiency of such applications.

Investigating a bit further, we extend the question of what is currently the reason for not developing serious games to what are in general the inhibitors and obstacles one would face when deciding to develop serious games. **Two appear to be the main obstacles in getting involved with the development of serious games, the first being lack of funding while the second appears to be lack of expertise**, as can be seen in the corresponding graph.

## 6. ANNEXES

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### 6.1 Annex A – The ‘Demand side’ questionnaire

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#### DEMAND SIDE QUESTIONNAIRE ‘Questions and potential replies’

1. Please select the category that best describes your professional background.
  - a. ICT
  - b. Arts / graphic design
  - c. Research
  - d. Health
  - e. Education
  - f. Human resource
  - g. Business management
  - h. Other (please specify)
  
2. How much do you like playing videogames in general?
  - a. Very much
  - b. I enjoy it
  - c. Neither like / nor dislike
  - d. Rather dislike
  - e. Not at all
  
3. How familiar are you with the term “Serious Games”?
  - a. Very much
  - b. Somewhat
  - c. I have only heard of the term
  - d. Not at all
  
4. When was the first time you heard about Game-based learning or Serious Games?
  - a. Less than 6 months ago
  - b. More than 6 months ago but less than 1 year
  - c. 1-3 years ago
  - d. Over 3 years ago
  - e. Never heard of before
  
5. How did you learn about Serious Games?
  - a. At work
  - b. At school/university
  - c. In the newspapers
  - d. TV
  - e. Internet
  - f. Conferences

- g. Other
6. How many Serious Games do you know?
- None
  - 1-5
  - 5-10
  - More than 10
7. How often do you typically use Serious Games?
- Never
  - A few times
  - Sometimes
  - Often
  - Very often
8. Do you think that a Serious Game can be an effective learning environment for adults?
- Yes
  - No
  - I don't know
9. Would you be interested to play a Serious Games in the future?
- Definitely
  - Probably
  - Not sure
  - Probably not
  - Definitely not
10. Would you be willing to use Serious Games in your organisation in the future?
- Definitely
  - Probably
  - Not sure
  - Probably not
  - Definitely not
11. Would you recommend the concept of Serious Games to colleagues or contacts within your industry / field of profession?
- Definitely
  - Probably
  - Not sure
  - Probably not
  - Definitely not
12. How likely is your organization to use Serious Games for vocational purposes in your company?
- Definitely
  - Probably
  - Might or might not use it
  - Probably will not use it
  - Definitely will not use it

13. What do you consider to be the main obstacles of introducing Serious Games in your business?
- Lack of money
  - Lack of interest
  - Lack of knowledge about Serious Games
  - Lack of training possibilities
  - Other
14. Please rank from 6 (less important) to 1 (most important) which of the following statements is the most important consideration when deciding of introducing Serious Games in your company/organization?
- It is cost effective
  - It guarantees the best results compared to other methods and tools
  - The users are likely to be interested and motivated
  - Users can learn from simulated real experience in a safe situation
  - Users can learn without temporal and spatial limits
  - Other
15. What are the reasons for not using Serious Games (tick all that apply)?
- I have never heard of such applications
  - I am not interested in such applications
  - I never had the opportunity to get familiar with such applications
  - Such applications are not useful for my work
  - I do not have time to get familiar with Serious Games
  - I do not believe that Serious Games are valuable learning tools
  - Serious Games are too much fun for users and thus are not effective
  - I have insufficient experience to assess the efficiency of such applications
  - Serious Games are too expensive
  - Other
16. Gender.
- Male
  - Female
  - Prefer not to say
17. Age.
- 18-24,
  - 25-34,
  - 35-44,
  - 45-54,
  - 55- 64,
  - 65 and above,
  - prefer not to say
18. Education.
- High school
  - trade/vocational school
  - collage/university
  - prefer not to say

## 6.2 Annex B – The ‘Supply side’ questionnaire

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### **SYPPLY SIDE QUESTIONNAIRE**

#### **‘Questions and potential replies’**

1. Please select the category that best describes your professional background.
  - a) ICT
  - b) Arts / Graphic Design
  - c) Research
  - d) Health
  - e) Education
  - f) Human resource
  - g) Business management
  - h) Other
  
2. How familiar are you with the term “Serious Games”?
  - a) Very much
  - b) Somewhat
  - c) I have only heard of the term
  - d) Not at all
  
3. When was the first time you heard about Serious Games?
  - a) Less than 6 months ago
  - b) More than 6 months ago but less than 1 year ago
  - c) 1-3 years ago
  - d) Over 3 years ago
  - e) Never heard of the term before
  
4. How did you learn about Serious Games?
  - a) At work
  - b) At school/university
  - c) In the newspapers
  - d) TV
  - e) Internet
  - f) Conferences
  - g) This is the first time I hear about it
  - h) Other
  
5. How many Serious Games do you know?
  - a. None
  - b. 1-5
  - c. 5-10
  - d. More than 10
  
6. Have you ever been involved in the development of a Serious Game?
  - a) Never

- b) 1-5
  - c) 5-9 times
  - d) Over 10 times
7. How many Serious Games do you or your company / organisation usually develop within one year?
- a) 1-3
  - b) 3-5
  - c) 5-10
  - d) More than 10
  - e) None
8. Do you think that Serious Games can be an effective learning device for adults?
- a) Yes
  - b) No
  - c) I don't know
9. Would you recommend the concept of Serious Games to colleagues or contacts within your industry / field of profession?
- a) Definitely
  - b) Probably
  - c) Not sure
  - d) Probably not
  - e) Definitely not
10. Do you believe that your company/organization would be interested in the development of Serious Games?
- a) Definitely
  - b) Probably
  - c) Maybe/Maybe not
  - d) Probably not
  - e) Definitely not
11. What do you consider to be the main obstacles of being involved in the development of Serious Games in your business (tick all that apply)?
- a) Lack of money
  - b) Lack of interest
  - c) Lack of knowledge about Serious Games
  - d) Lack of training possibilities
  - e) Lack of technological capacities
  - f) Lack of pedagogical capacities
  - g) Lack of capacities in graphics
  - h) Lack of designing capacities
  - i) Lack of experts in general
  - j) Other (please specify)
12. Please rank from 7 (least important) to 1 (most important) which of the following statements is the most important consideration when deciding of being involved in the development of Serious Games in your company/organization?
- a) It is cost effective

- b) It guarantees the best results
- c) The staff is likely to be interested
- d) It is a unique selling point / competitive advantage
- e) Users can learn from simulated real experience in a safe situation
- f) Users can learn without temporal and spatial limits
- g) Other:

13. What are the reasons for not developing Serious Games (tick all that apply)?

- a) I have never heard of such applications
- b) I am not interested in such applications
- c) I never had the opportunity to get familiar with such applications
- d) Such applications are not useful for my work
- e) I do not have time to get familiar with Serious Games
- f) Serious Games are not one of my priorities.
- g) I do not believe that Serious Games are valuable learning tools
- h) Serious Games are too much fun for users and thus are not effective
- i) I have insufficient experience to assess the efficiency of such applications:
- j) I do not believe that there is a market for electronic learning games
- k) To develop SG too much budget is required
- l) I do not have enough experience to develop a SG.
- m) Other (please specify)

14. Would you be interested to be involved in the development of Serious Games in the next 6-12 months?

- a) Definitely
- b) Probably
- c) Not sure
- d) Probably not
- e) Definitely not

15. Would you be willing to develop Serious Games in your organisation in the future?

- a) Definitely
- b) Probably
- c) Not sure
- d) Probably not
- e) Definitely not

16. Do you consider the market for Serious Games as an interesting field with future potential and worth investing in?

- a) Yes
- b) No
- c) I don't know

17. Do you think there is a market for Serious Games in your country?

- a) Definitely
- b) Probably
- c) Not sure
- d) Probably not
- e) Definitely not

18. Do you think that your staff / colleagues / superiors would be interested in developing Serious Games for vocational training?

- a) Yes
- b) No
- c) I don't know

19. Number of employees of your company / organisation.

- a) Less than 10
- b) 10-99
- c) 100-499
- d) Above 500
- e) N/A

20. Type of company / organisation.

- a) Private
- b) Public
- c) Other
- d) N/A

21. Gender.

- a) Male
- b) Female
- c) Prefer not to say

22. Age.

- a) 18-24,
- b) 25-34,
- c) 35-44,
- d) 45-54,
- e) 55- 64,
- f) 65 and above,
- g) prefer not to say

23. Education.

- a) High school
- b) trade/vocational school
- c) collage/university
- d) prefer not to say