

## Supplementary materials: tables and figures

**Table S1.** Distribution of respondents in sample with respect to the actual percentage of WUP members in each geographical macro-area.

| Geographical Area | % WUP Membership | % Respondents in sample |
|-------------------|------------------|-------------------------|
| Oceania           | 16.0%            | 13.7%                   |
| East Asia         | 13.1%            | 5.8%                    |
| South Asia        | 5.9%             | 3.6%                    |
| Europe            | 45.0%            | 43.9%                   |
| Middle Asia       | 0.8%             | 0.7%                    |
| North America     | 15.9%            | 19.4%                   |
| South America     | 2.2%             | 6.5%                    |
| Africa            | 1.2%             | 6.5%                    |

**Table S2.** Age distribution of respondents.

| Age           | 18–30 | 31–40 | 41–50 | 51–65 | 66–75 | > 75 | Total respondents (n) |
|---------------|-------|-------|-------|-------|-------|------|-----------------------|
| Middle East   | 0     | 0     | 0     | 1     | 0     | 0    | 1                     |
| Oceania       | 1     | 1     | 6     | 14    | 2     | 0    | 23                    |
| East Asia     | 0     | 0     | 5     | 2     | 0     | 0    | 7                     |
| South Asia    | 0     | 0     | 0     | 0     | 0     | 0    | 0                     |
| Europe        | 1     | 9     | 15    | 32    | 5     | 0    | 62                    |
| North America | 2     | 3     | 9     | 12    | 0     | 1    | 27                    |
| South America | 2     | 0     | 4     | 3     | 0     | 0    | 9                     |
| Africa        | 0     | 0     | 7     | 1     | 0     | 0    | 8                     |
| Total (n)     | 6     | 13    | 46    | 65    | 7     | 1    | 138                   |
| Total (%)     | 4%    | 9%    | 33%   | 47%   | 5%    | 1%   | 100%                  |

**Table S3.** Distribution of the female and male percentages according the work category within the geographical areas with respect to the total WUP membership (source: WUP, 2016).

| Geographical Area | Work Organisation | Female | Male   | Tot. Female | Tot. Male |
|-------------------|-------------------|--------|--------|-------------|-----------|
| Oceania           | Business          | 1.06%  | 3.46%  | 4.25%       | 13.04%    |
|                   | Government        | 2.39%  | 6.12%  |             |           |
|                   | NGO               | 0.27%  | 1.06%  |             |           |
|                   | Research          | 0%     | 0.8%   |             |           |
|                   | Not specified     | 0.53%  | 1.6%   |             |           |
| East Asia         | Business          | 0.27%  | 3.72%  | 0.54%       | 12.5%     |
|                   | Government        | 0.27%  | 2.13%  |             |           |
|                   | NGO               | 0%     | 2.13%  |             |           |
|                   | Research          | 0%     | 3.46%  |             |           |
|                   | Not specified     | 0%     | 1.06%  |             |           |
| South Asia        | Business          | 0.53%  | 2.93%  | 2.92%       | 5.59%     |
|                   | Government        | 0.53%  | 0.8%   |             |           |
|                   | NGO               | 0.53%  | 0.53%  |             |           |
|                   | Research          | 1.33%  | 1.33%  |             |           |
| Europe            | Business          | 1.33%  | 3.19%  | 13.83%      | 28.73%    |
|                   | Government        | 6.65%  | 18.09% |             |           |
|                   | NGO               | 1.06%  | 0.53%  |             |           |
|                   | Research          | 1.33%  | 1.6%   |             |           |
|                   | Not specified     | 3.46%  | 5.32%  |             |           |
| North America     | Business          | 0.27%  | 1.6%   | 4.79%       | 9.32%     |
|                   | Government        | 3.72%  | 5.59%  |             |           |
|                   | Research          | 0.53%  | 0.8%   |             |           |
|                   | Not specified     | 0.27%  | 1.33%  |             |           |
| South America     | Business          | 0.8%   | 0%     | 1.87%       | 0.27%     |
|                   | Government        | 0.53%  | 0.27%  |             |           |
|                   | Research          | 0.27%  | 0%     |             |           |
|                   | Not specified     | 0.27%  | 0%     |             |           |
| Africa            | Business          | 0%     | 0.27%  | 0.53%       | 1.87%     |
|                   | Government        | 0%     | 0.27%  |             |           |
|                   | Research          | 0%     | 1.06%  |             |           |
|                   | Not specified     | 0.53%  | 0.27%  |             |           |
| Sum               |                   |        |        | 28.7%       | 71.3%     |

**Table S4.** Distribution of female respondents ( $n = 37$ ) in each work organisation in the geographical areas.

|  | Government<br>Agency/<br>Department | Research/<br>Education<br>Institution | Business<br>Company | NGO      | Total (N and %) female<br>respondents per<br>geographical area |       |
|--|-------------------------------------|---------------------------------------|---------------------|----------|--|-------|
| Middle East  | -                                   | -                                     | -                   | 0%       | 0  | 0%    |
| Oceania  | 37.5%                               | 66.7%                                 | 0%                  | 0%       | 8  | 34.8% |
| East Asia  | 100%                                | 0%                                    | 0%                  | 0%       | 1  | 14.3% |
| South Asia   | -                                   | -                                     | -                   | -        | 0  | -     |
| Europe   | 19.0%                               | 0%                                    | 25.0%               | 45.5%    | 15   | 24.2% |
| North America  | 26.3%                               | 25%                                   | 0%                  | 33.3%    | 7  | 25.9% |
| South America  | 0%                                  | 33.3%                                 | 100%                | 50%      | 3  | 33.3% |
| Africa   | 33.3%                               | 50%                                   | -                   | -        | 3  | 37.5% |
| Total (N and %)<br>female<br>respondents in<br>work organisation | 22<br>25.3%                         | 5<br>29.4%                            | 3<br>23.1%          | 7<br>35% |  |       |

**Table S5.** Educational level of the respondents according their work organisation ( $n = 137$ ).

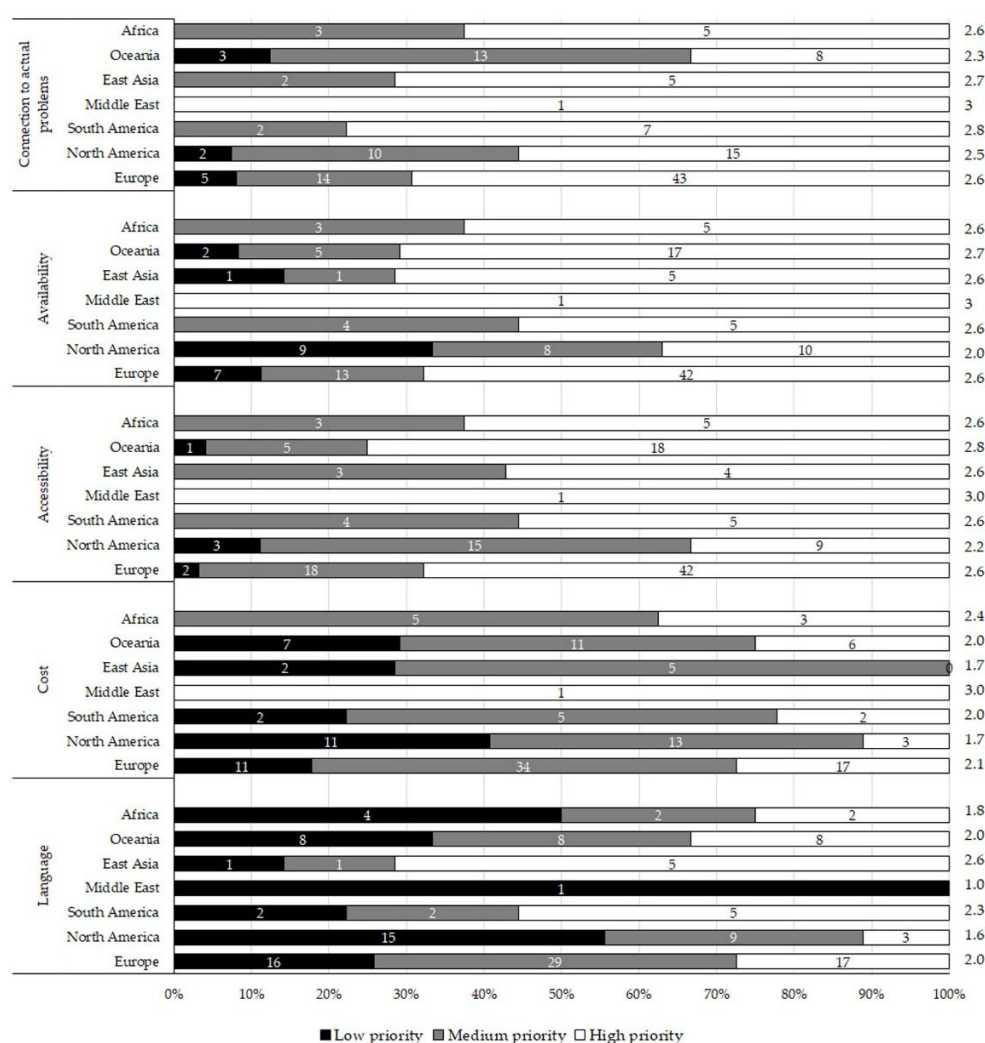
| Education                         | PhD   | Master<br>degree | Bachelor's<br>degree | Diploma/<br>Certificate | High<br>school | Other | Total (N)<br>respondents |
|-----------------------------------|-------|------------------|----------------------|-------------------------|----------------|-------|--------------------------|
| Government Agency/<br>Department  | 11.5% | 48.3%            | 24.1%                | 13.8%                   | 2.3%           | 0.0%  | 87                       |
| Research/Education<br>Institution | 76.5% | 17.6%            | 5.9%                 | 0.0%                    | 0.0%           | 0.0%  | 17                       |
| Business                          | 15.4% | 38.5%            | 30.8%                | 7.7%                    | 0.0%           | 7.7%  | 13                       |
| NGO                               | 25.0% | 40.0%            | 25.0%                | 10.0%                   | 0.0%           | 0.0%  | 20                       |
| TOTAL %                           | 21.9% | 42.3%            | 22.6%                | 10.9%                   | 1.5%           | 0.7%  | 137                      |

**Table S6.** Distribution of WUP respondents ( $n = 137$ ) according work organisation with percentages in the geographical areas.

|                             | Government<br>Agency/<br>Department              | Research/<br>Education<br>Institution | Business<br>company | NGO  | Total (N)<br>respondents |
|-----------------------------|--|---------------------------------------|---------------------|------|--------------------------|
| <b>Your organisation is</b> | <b>Percentages (%) in each geographical area</b> |                                       |                     |      |                          |
| Middle East                 | 0%   | 0%                                    | 0%                  | 100% | 1                        |
| Oceania                     | 70%  | 13%                                   | 9%                  | 9%   | 23                       |
| East Asia                   | 14%  | 57%                                   | 14%                 | 14%  | 7                        |
| Europe                      | 68%  | 2%                                    | 13%                 | 18%  | 62                       |
| North America               | 70%  | 15%                                   | 4%                  | 11%  | 27                       |
| South America               | 33%  | 33%                                   | 11%                 | 22%  | 9                        |

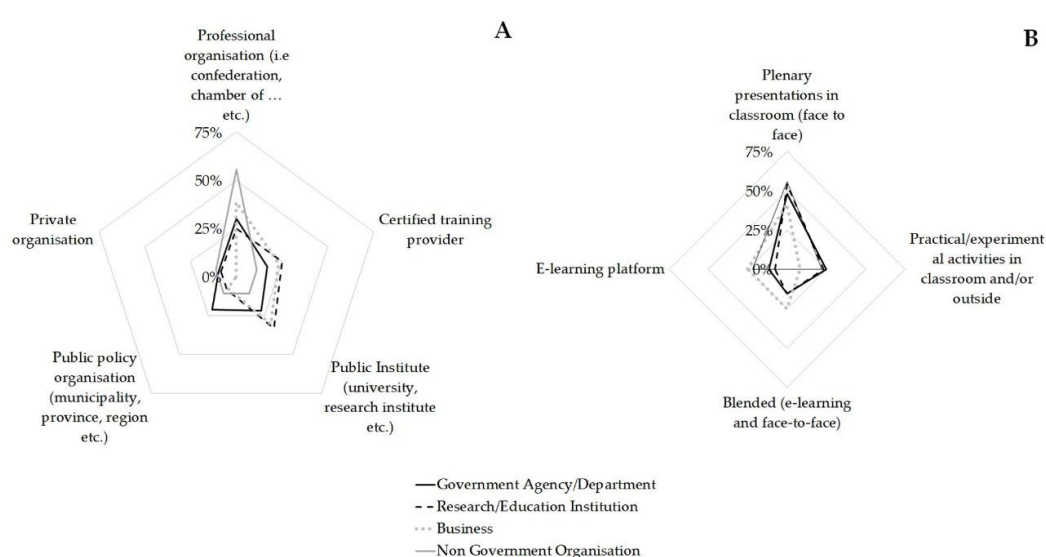
**Table S7.** Distribution of WUP respondents ( $n = 137$ ) according work sector with percentages in the work organisation.

|                 | Governance | Management | Policy-Planning | Operations | Education | Corporate support | Other | Total (N) respondents |
|-----------------|------------|------------|-----------------|------------|-----------|-------------------|-------|-----------------------|
| Respondents (N) | 11         | 63         | 23              | 20         | 14        | 2                 | 4     | 137                   |
| Government      |            |            |                 |            |           |                   |       |                       |
| Agency/         | 11.5%      | 57.5%      | 19.5%           | 10.3%      | 0.0%      | 1.1%              | 0.0%  | 87                    |
| Department      |            |            |                 |            |           |                   |       |                       |
| Research/       | 0.0%       | 5.9%       | 5.9%            | 5.9%       | 82.4%     | 0.0%              | 0.0%  | 17                    |
| Education       |            |            |                 |            |           |                   |       |                       |
| Institution     | 0.0%       | 30.8%      | 30.8%           | 30.8%      | 0.0%      | 0.0%              | 7.7%  | 13                    |
| Business        |            |            |                 |            |           |                   |       |                       |
| company         |            |            |                 |            |           |                   |       |                       |
| NGO             | 5.0%       | 40.0%      | 5.0%            | 30.0%      | 0.0%      | 5.0%              | 15.0% | 20                    |

**Figure S1.** Level of priority given by respondents from different geographical areas to aspects of knowledge transfer that should be improved. Number of respondents for each level of priority are reported in the bars. Mean values of the level of priority have been calculated by assigning 3 to high priority, 2 to medium priority, 1 to low priority. Mean values are shown on the right side of the bars. Statistical differences between mean values of different categories (in case, indicated by small letters next to the mean values) have been identified by ANOVA test, followed by LSD test at  $p < 0.05$  ( $n = 137$ ).

**Table S8.** Percentage of collaborations between work categories.

| Category collaborating with.   | Agencies | Business companies | Policy makers | Politicians | NGOs | Scientific institutions |
|--------------------------------|----------|--------------------|---------------|-------------|------|-------------------------|
| Government Agency/Department   | 69%      | 52%                | 56%           | 69%         | 76%  | 63%                     |
| NGO                            | 53%      | 65%                | 82%           | 59%         | 94%  | 71%                     |
| Business                       | 69%      | 62%                | 54%           | 31%         | 46%  | 54%                     |
| Research/Education Institution | 86%      | 43%                | 43%           | 21%         | 86%  | 57%                     |



**Figure S2.** Training. A) Types of professional training providers described by the respondents, and B) Type of courses attended by the respondents. Significant differences between the stakeholders' categories identified by the Fisher exact are indicated in Table S8 and S9.

**Table S9.** Type of training providers.

| Category of respondents      | Professional organization (1) | Certified training provider (2) | Public Institute (3) | Public policy organisation (4) | Private organization (5) | Significance between the percentages   |
|------------------------------|-------------------------------|---------------------------------|----------------------|--------------------------------|--------------------------|--|
| Government Agency/Department | 30.1% a                       | 16.8% b                         | 22.1% ab             | 21.2% ab                       | 9.7% c                   | 1vs.2: $p = 0.02$ , $n = 53$<br>1vs.5: $p = 0.0003$ , $n = 45$<br>3vs.5: $p = 0.01$ , $n = 36$<br>4vs.5: $p = 0.01$ , $n = 35$ |
| Research/Education           | 25.0% a                       | 25.0% a                         | 33.3% a              | 8.3% b                         | 8.3% b                   | 1,2vs.4,5: $p = 0.0003$ , $n = 4$<br>3vs.4,5: $p = 0.000$ , $n = 5$  |
| Business company             | 38.5% a                       | 23.1% b                         | 30.8% ab             | 7.7% c                         | 0.0% d                   | 1vs.2: $p = 0.01$ , $n = 8$<br>1,2,3vs.4: $p = 0.000$ , $n = 6,4,5$<br>1,2,3vs.5: $p = 0.000$ , $n = 5,3,4$                    |
| NGO                          | 55.6% a                       | 11.1% b                         | 11.1% b              | 11.1% b                        | 11.1% b                  | 1vs.2,3,4,5: $p = 0.000$ , $n = 7$   |

Types of training providers chosen by the respondents for their training experience. Significant differences between the percentages are identified by the Fisher exact by  $2 \times 2$  table for comparison of frequencies. Different small letters (a, b, c) within the respondent group, indicate significant differences between the percentages;  $p$  value and  $n$  are indicated.

**Table S10.** Types of learning delivery.

| Category of respondents | Plenary presentations in classroom (1) | Practical activities (2) | Blended learning (3) | E-learning (4) | Significance between the percentages                  |
|-------------------------|--|--------------------------|----------------------|----------------|---|
| Government              |  |                          |                      |                | 1vs.2: $p = 0.0006$ , $n = 70$                        |
| Agency/                 | 48% a                                  | 25% b                    | 16% bc               | 11% c          | 1vs.3-4: $p = 0.000$ , $n = 61$ , $n = 57$            |
| Department              |  |                          |                      |                | 2vs.4: $p = 0.008$ , $n = 35$                         |
| Research/               | 54% a                                  | 23% b                    | 15% bc               | 8% c           | 1vs.2,3,4: $p = 0.000$ ; $n = 10$ , $n = 9$ , $n = 8$ |
| Education               |  |                          |                      |                | 2vs.4: $p = 0.003$ , $n = 4$                          |
| Business                |  |                          |                      |                | 1vs.3,4: $p = 0.0008$ , $n = 8$                       |
| companies               | 42% a                                  | 8% c                     | 25% b                | 25% b          | 1vs.2: $p = 0.000$ , $n = 6$                          |
|                         |  |                          |                      |                | 2vs.3-4: $p = 0.001$ ; $n = 4$                        |
| NGOs                    | 56% a                                  | 22% b                    | 0% c                 | 22% b          | 1vs.2,3,4: $p = 0.000$ ; $n = 9$ , $n = 6$ , $n = 8$  |
|                         |  |                          |                      |                | 2vs.3: $p = 0.000$ , $n = 3$                          |

Types of learning delivery. Significant differences between them, identified by the Fisher exact by  $2 \times 2$  table for comparison of frequencies. Different small letters (a, b, c) within the respondent group, indicate significant differences between the percentages;  $p$  value and  $n$  are indicated.



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