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PRACTICAL GUIDANCE ON APPLYING THE NEW WORKING METHODS BY THE HIGH-LEVEL GROUP FOR THE MODERNIZATION OF OFFICIAL STATISTICS

Prepared by the High-level group

In October 2014, the Bureau discussed innovative working methods introduced in the activities overseen by the UNECE High-Level Group for the Modernization of Official Statistics (HLG-MOS) and the extent to which these could be applied in other CES work areas. ***The Bureau is invited to discuss the guidance provided and advise implementing these methods more widely in CES work.***

1. The UNECE High-level Group for the Modernization of Official Statistics (HLG-MOS) was created in 2010 by the Bureau of the Conference of European Statisticians (CES). It comprises the heads of selected national and international statistical organizations, and has a mandate to reflect on and guide strategic developments in the ways in which official statistics are produced.

2. The urgency of the modernization work meant that new approaches were needed for activities related to statistical modernization. At the same time, many statistical organizations found themselves under increasing financial constraints, restricting budgets for travel and international collaboration. To resolve these demands and constraints it has been necessary to introduce a number of innovative working methods. These were outlined in paper ECE/CES/BUR/2014/OCT/14 which was discussed by the Bureau at its October 2014 meeting.

3. The conclusion of that discussion was:

> *The Bureau showed high interest in the innovative working methods used in the activities of the HLG. These methods can be experimented in other areas of international collaboration work under CES. It would be useful to have practical guidance on how to apply the new working methods.* (Report of the October 2014 CES Bureau meeting, para 38)

4. This paper aims to provide the practical guidance requested in three areas: sprints, web conferences and wikis. The guidance is written with the intention that it could be given to new and existing expert groups to encourage them to use these working methods where appropriate.

A. Sprints[1]

Introduction

5. The idea of holding sprint sessions to develop standards for official statistics is fairly new, but has already shown its ability to considerably reduce development time and cost. This section sets out the experiences and lessons learned from the sprint sessions held to date, in the context of projects overseen by the High-Level Group for the Modernization of Official Statistics. It also makes recommendations for the conduct of future sprint sessions in the context of developing statistical standards.

What is a sprint?

6. A sprint is an intensive effort, restricted to a specific duration, e.g. one week, to deliver a pre-determined output. In the official statistical community, a sprint can be explained as being something like a very intense and focused workshop with a specific deliverable.

7. During a sprint, participants break down the task to be accomplished into small components, each of which can be resolved in one or two hours by a small group. Sprints involve a lot of parallel working, so one person cannot be involved in everything. The aim is to build on the best ideas and experiences of all participants to reach an outcome that is "owned" by all. This outcome is seldom exactly the one envisaged at the start of the sprint, as ideas evolve through the sprint process. However, it should be at least as useful and probably better as a result.

Logistics

Duration

8. The first two HLG-MOS sprints were two weeks long, whereas others have been completed within a week. Some participants of the two-week sprints felt that they were rather slow to get going, so for later sprints much of the introductory material was covered in pre-sprint web conferences. This meant that the participants felt they were starting the real work from day one. Some participants, particularly those with family responsibilities, also felt that two weeks is rather a long time to be away from home. Changing to one-week sprints did, however, put more burden on the sprint team, requiring much more pre-sprint and post-sprint work to compensate for the limited time available during the sprint itself.

Venue and facilities

9. The ideal set-up is to have the exclusive use of at least three rooms for the whole duration of the sprint. It is preferable that these rooms are located close to each other. At least one of the rooms should be large enough to comfortably accommodate the whole group seated at desks, which should preferably be organised in a U shape, facing a screen for presentations. All rooms should be equipped with whiteboards, flip-charts and writing materials. Ideally it should be possible to stick posters and flip-chart sheets on the walls.

[1] This section is mostly drawn from the paper "Sprints – Lessons learned from HLG Projects" by Thérèse Lalor and Steven Vale, September 2013, available at http://www1.unece.org/stat/platform/x/kIbsB .

Plenty of stationery, particularly paper, pens and post-it notes should be available. WiFi Internet access in all rooms is important, along with easy access to an on-line collaboration space, e.g. a wiki. Participants should bring their own laptops / tablets. Finally, to save time, it is helpful if coffee and lunch facilities are available close by.

Travel and accommodation

10. If all participants stay in the same hotel during the sprint, this helps to build the team spirit and facilitates discussions in the evenings and over breakfast. It is helpful if the hotel has a public seating area where people can work in small groups.

People

Selecting the participants

11. Ideally a sprint should have 10-15 participants. If there are more, it can be difficult to maintain a sprint atmosphere and to get people to work as a single group. Normally there should be no more than two participants per organization, to ensure that as many organizations as possible can be represented. Participants should come from a range of backgrounds and, between them, should have all the necessary skills and experience to produce the output. For HLG-MOS sprints, participants are mainly at the "expert level" and have included methodologists, IT specialists, metadata experts, business / information architects and external experts, depending on the topic. However, having a more senior person present can help ensure a sufficiently strategic focus.

12. Selection of participants for HLG-MOS sprints is typically by nomination from interested organizations, with targeted follow-up to ensure key people and skills are present.

Building the team

13. In most cases, sprint participants already know a few of their fellow "sprinters", but it has never been the case that everyone knows everyone else beforehand. For this reason, it is important for the sprint facilitators to try to create a team spirit as soon as possible. This should start already in the pre-sprint web conferences, where participants should introduce themselves and ideally use a web-cam.

14. Encouraging participants to meet for dinner the evening before the sprint starts is a useful way of helping them get to know each other in a less formal environment before the real work starts. Ensuring a good mix of people in the small teams for the first few rounds of tasks within the sprint can also help.

15. One important sprint rule is that there is no hierarchy within the sprint, all participants are equal and all views are valid. This can be a challenge if an organization sends two participants, one of which works for the other.

16. A particular challenge is how to incorporate the representatives of the host organization in the sprint team. Ideally, for the duration of the sprint, they should consider themselves out of the office. Being a sprint participant is a full time commitment, and the participants should try to refrain from their regular job during this period. They should

advise managers and colleagues accordingly. They should also try to join the group in the evenings if possible.

Sprint facilitators

17. It is useful to have two sprint facilitators. One should take the role of being a “sprint master”, whilst the other should take on more of a support and documentation role. However, both should be capable of steering group discussions towards agreements and solutions, resolving conflicts and stopping people deviating from the sprint goals. It is, therefore, essential that the facilitators project confidence and authority and are able to manage the group. They should also be constantly aware of group dynamics and try to identify and resolve any potential problems before they escalate.

18. On the other hand, the sprint group decides the priorities and contents of the outputs and takes ownership of the working processes to reach its goals. The facilitators should, therefore, be careful that they are not steering the contents and imposing their views. In this respect, it is helpful if the sprint facilitators are not experts in the topic, although some background knowledge is useful to be able to follow the conversations and issues. Some training in facilitation techniques or significant practical experience in delivering interactive training courses is useful for this role. The facilitators need to have a sound understanding of the project goals.

19. Documenting progress, decisions and outcomes is very important. The sprint should normally result in a paper or report of some kind, and it is much easier to start putting this together, at least in outline, during the sprint, than to try to write it afterwards. To facilitate this, participants should be encouraged to write up the conclusions of their discussions and post them in a common work space such as a wiki, for others to comment, and for the facilitators to incorporate them into the overall documentation.

20. The facilitators should take photos of all whiteboard or flip-chart diagrams as these may be useful later to illustrate key points in the documentation.

Before the sprint

21. Planning a sprint typically takes around three months, with the work becoming more intensive as the sprint approaches. The first steps are to secure top management support for the proposed sprint, choose a sprint-master, find a location and set the dates. After these pre-requisites are in place, a call for participation should be launched. This call for participation should make it clear that it may be necessary to limit numbers and should explain what a sprint is and how it is different from a traditional workshop or seminar. It is often necessary to state clearly that papers and PowerPoint presentations are not required!

22. In preparation for the first sprint on a particular topic, the sprint master or organising team should consult key stakeholders about their expectations for the scope and outcomes of the sprint. This consultation should include a range of levels, from top managers to experts, and a wide range of organizations, not just those expected to send participants to the sprint. The summary of this consultation process provides a clear view of the expectations of the statistical community, which is a very useful starting point for pre-sprint discussions with participants.

23. At least two pre-sprint web conferences are essential to help the participants to get to know each other and to cover all the basics about how a sprint works. It is helpful if participants outline their backgrounds, ideas and expectations for the sprint so that some degree of consensus can be reached before they physically meet.

During the sprint

24. Most HLG-MOS sprints have been opened or addressed by the head of the host organization. Active interest from this level can help to inspire participants. Towards the end of each sprint, a presentation is usually given to the staff of the host organization. This serves several purposes but mainly helps the participants to focus on how to communicate their work and explain it to people outside the sprint group.

25. After any introductory material, the first task of the sprint team is to create a work plan covering the duration of the sprint. This is normally achieved by getting participants to write down issues they see as important on post-it notes, which are then sorted into clusters, which are then prioritised. This exercise creates the outline agenda for the sprint.

26. A short plenary session first thing every morning is useful. This can review what has been done, and what remains, and to decide on the priorities for that day. A useful addition to this session is the idea of "soapbox" presentations. These are opportunities for participants to present briefly (i.e. in 2-3 minutes maximum) any issues they think are important. "Soapboxes" are often a good opportunity to share ideas from informal discussions the previous evening.

27. Participants then break into small groups to discuss and resolve the priority issues. These groups are usually self-selected, but some mixing of participants by the facilitators can be useful to ensure the same people are not always working together and to ensure the group dynamics are maintained. Small group discussions should typically last between one and two hours and have a clear deadline. The facilitators should check each group periodically to see if the deadline will be met. The small groups briefly report their outputs in plenary sessions. Typically about 70-80% of time is spent in small groups and 20-30% in plenary sessions.

28. If a group wants more time, or is struggling to resolve a particular issue, several options are possible:

- Give them a little more time – if it looks like agreement is close and possible.
- Discuss the issue in plenary – but only if this would not take too long, e.g. short presentations of two views, then a vote.
- Change one or two people in the group – to bring in fresh ideas.
- "Park" the issue – leave it to one side for a while if it is not urgent, come back to it later with fresh minds.

29. During a sprint, participants tend to get very involved and enthusiastic, wanting to share their views and ideas. For this reason, it is useful to have a clear way of asking for the floor. In HLG sprints, participants are given different coloured objects. They hold up one colour if they want to speak, another if they think the speaker is going into too much detail, and a third if they think the discussion is going off-topic.

30. Finally, a good tradition that has developed at HLG sprints is to ask all participants to bring snacks from their home countries for coffee breaks. This creates a non-work topic of conversation, which helps people get to know each other better.

After the Sprint

31. The main task in the immediate aftermath of a sprint session is to transform the sprint outputs into the final versions of the sprint documents. During a sprint, there is only really time to capture ideas and outlines, but these need to be expanded and made understandable for a wider audience. Normally at least a week is needed for this, usually involving the facilitators and some participants.

32. It is also useful to take stock at this point about the organization of the sprint. What worked, and what should be done differently in future?

Virtual Sprints

33. Whilst most HLG-MOS sprints have been face-to-face events, the idea of virtual sprints has also been tested, with some success. In most cases, this approach has involved bringing sprint participants together several times, each for a few hours, by web conference. For example, a virtual sprint can take place over a week, with a two-hour plenary web conference each day, at the time most suitable given the different time-zones of participants. In-between these plenary sessions, participants work individually or in small groups (with people in similar time zones) to produce inputs to the next plenary discussion.

34. Virtual sprints are clearly much cheaper than face-to-face sprints and can be effective in certain circumstances, particularly if the “sprinters” have already met beforehand. They work best for topics that are already reasonably well developed, such as revising an existing standard but are less suitable for developing new material which usually requires more intensive discussion.

Conclusion

35. Sprints have proved very valuable in the context of HLG-MOS projects. The Generic Statistical Information Model (GSIM) Development Project was completed within a year which is less than half of the time taken for comparable initiatives using more traditional methods. There is a cost, both in money and time, but feedback from chief statisticians so far is that the value of the outputs more than outweighs the costs.

36. Whilst sprints are probably not the best approach in all situations, their value in the development process for international statistical standards seems to be confirmed.

B. Web conferences

Introduction

37. Telephone conferences have been used for international collaboration activities for the last 20 years or more, but they have certain limitations. They usually involve lengthy and expensive international telephone calls, participants can only hear each other, so miss out on the additional communication via facial expressions and body language, and it can sometimes be difficult to ensure a common understanding of complex issues through voice-only communication.

38. Web conferencing can overcome these problems. The most widely-known system is Skype which allows video and audio connections between multiple people. However, Skype is mostly used for one-to-one conversations, often for social purposes. It does not support video connections between multiple locations particularly well. A number of alternative products are available for more business-oriented use. The UNECE uses a system called WebEx[2], but other tools with similar functionality are available.

39. The advantages of web conferences include:

- Flexibility – it is possible to join web conferences from any location with an Internet connection, using desk-top or lap-top computers, tablets, smart-phones and other mobile devices.
- Cost – participation is generally free for participants, making it easier for people to join outside of normal working hours, from home or whilst travelling.
- Video – participants can use web-cams so that they can see others and be seen themselves. This seems to help participants get to know each other much quicker than audio-only communication.
- Screen sharing – All participants can see the same thing, a PowerPoint presentation, a document or a diagram. This facilitates common understanding and can be used as a tool for joint, live drafting of key outputs such as definitions.

Good Practices

Before the web conference

40. When a group is using web conferencing for the first time, there may be technical difficulties for some people to connect. These may be linked to the set-up of their computer, or the IT policies of their organization. For this reason, it is recommended to:

- Prepare clear guidelines for the connection process (e.g. http://www1.unece.org/stat/platform/display/wikis/Attending+a+Webex+Meeting).
- Offer a test call a day or so before the real call to make sure participants can connect.
- Give participants the names of people in their organizations who have successfully connected to web conferences previously and may be able to provide advice on any organization-specific issues.

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[2] http://www.webex.com/index_cmr.html

- Inform participants that the web conference will be opened 10-15 minutes early to allow time to connect.
- Have a person other than the meeting host available to deal with any connection issues.
- Have a fairly light agenda for the first web conference, to allow time to resolve connection issues.

41. After one or two web conferences, participants can usually connect without any problems.

During the web conference

42. One of the biggest problems in web conferences is often background noise from the microphones of participants. The host should remind participants to mute their microphones when they are not speaking (and to un-mute when they want to speak!). WebEx offers the possibility for the host to mute the microphones of specific participants if there is a problem.

43. Particularly for larger groups, it can be useful to have a convention for participants to ask for the floor, to avoid people over-speaking each other. In WebEx, there is a feature that allows participants to "raise their hand", so that the host sees a hand icon next to their name.

44. Screen-sharing functionality allows participants to show others what is on their screen. This can be useful for sharing presentations and documents, such as the web conference agenda. However, if it is possible for participants to connect without using a computer (WebEx allows participation by telephone only), it is important to send any key documents out in advance, so that all participants can see them.

45. Some web conferencing options allow the possibility to record the conference. This can be useful as a reference for drafting the minutes, but can also be used to create video records of part or all or the discussion, which can be shared with people who cannot be present. In this case, participants should be informed that the web conference is being recorded, and what the recording will be used for.

46. Within WebEx (and other systems) there is an instant chat facility, where participants can send messages either to the whole group or to specific individuals. This can be useful in several ways, but particularly if a participant is having difficulty establishing an audio connection.

Conclusion

47. Web conferences have now completely replaced telephone conferences for the groups and activities overseen by HLG-MOS. In a typical week this now means around 8-10 web conferences take place for these activities. Participants agree that web conferencing is far superior to traditional telephone conferences, and that being able to see colleagues in other organizations helps to build a team spirit much faster.

C. Wikis

Introduction

48. For many years, the main method for exchanging written information between participants in international collaboration activities has been e-mail. The problems with this approach are that it is easy to end up with multiple long chains of correspondence which do not always reach all participants and from which it is often difficult to extract the latest information. The development of interactive, collaborative web-based platforms, such as wikis, has helped to overcome these problems.

49. Several wiki platforms are available; the UN standard is Confluence. Wikis provide a communication channel in which information can be open to the public, or restricted to a specific group. Write access can be given to group members so that they can share ideas and documents. Wikis have proved to be particularly useful for creating knowledge bases, sharing results, communication within projects, and for joint drafting of manuals, guidelines and papers.

Good Practices

Access

50. As stated above, wikis can be open to the public or have restricted access. UNECE experience shows that allowing public write access requires a lot of effort to moderate content, with around 90% of contributions being spam such as advertising or political comment. Given the obvious risks of having such content on a UN web site, UNECE has adopted a policy of not allowing public write access. However, in the interests of transparency, it is good practice to allow public read access to all materials which are not sensitive or “work in progress”.

51. When write access is restricted to named users, and it is possible to trace all content to its author, it is possible to block anyone posting inappropriate material. UNECE has a general policy of allowing write access to anyone working in a national or international statistical organization who requests it. Other requests are treated on a case by case basis. In eight years of maintaining a wiki platform, with currently around 2000 users, UNECE has never had a problem with inappropriate content from a registered user.

Information management

52. A wiki typically starts out as two or three pages but can grow rapidly. As it becomes larger, the need for a logical structure to enable users to easily find information grows. The wiki moderator should be aware that it may be necessary to review the wiki structure from time to time to ensure that it remains relevant and easy to use.

53. It is important to review wikis, particularly those that are open to the public, on a regular basis, to see if the content is sufficiently up to date. Out of date material should be updated, archived or clearly marked that it is historical information. As with all web sites, it is important to give sufficient consideration to maintenance over time when creating new content.

Wiki management

54. Each wiki should have a clear owner. This may be a specific person or a team within an organization. The owner should be aware of their responsibilities regarding wiki management and content.

55. In addition, it is likely to be necessary to identify a person or team with overall responsibility for maintaining the wiki platform. This includes tasks such as managing user accounts, managing plug-ins and updates, and advising owners of individual wikis of the best technical solutions for their needs. In the context of the UNECE wiki platform, this task takes approximately one third of a full-time equivalent staff member.

Conclusion

56. Wikis bring considerable benefits to collaborative working. It is now hard to imagine how UNECE could function efficiently without them. The UNECE statistical wiki platform now receives around three times as many “hits” as the traditional UNECE statistics web site, indicating that users prefer the more flexible and interactive format. There is a cost in terms of wiki management and maintenance, but with good planning and policies, this is easily outweighed by the benefits.

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