Workshop Report: Production Partnership Management

This is the report of the International Workshop on Production Partnership Management held at Ordnance Survey, Southampton, England on 7-9 November 2007

Summary

32 delegates from 9 countries attended the workshop. Participants came from a variety of organisations. These included mapping agencies as well as private surveying companies. There was a good spread from across Europe with others attending from as far as India.

The <u>published first draft of the PPM guide</u> defines PPM as a 'Method of customer and supplier working together to ensure the customer requirements are met by the supplier's processes in a relationship that fosters continual improvement for mutual benefit.'

The workshop created discussion and debate on applicability and scope of Production Partnership Management (PPM). The workshop agreed that although parties involved in the production of GI have different perspectives they all seek mutually beneficial outcomes. It was accepted that the benefits of Production Programme Management, illustrated by Ordnance Survey and her supplier's experiences, can facilitate these outcomes.

Using the feedback and support gathered at the workshop the PPM document will be redrafted as a document suitable for consideration by TC 211 for inclusion into the body of ISO documents supporting Geographic Information.

Background and Purpose of the Workshop

With ever increasing demands in value and quality in the GI market we need to manage our production processes more effectively in an environment that embraces continual improvement. Innovation and continual improvement must be balanced rather than replaced with control. These often conflicting requirements can be met through Production Partnership Management (PPM).

The increase in value and quality can already be demonstrated by a number of companies. The aim of the workshop was to consider the application and agree this best practice through the acceptance of a guideline document (a draft document was made available in October 2007). This document may then be taken forward by the GI industry with the possibility of submission as a draft ISO Standard.

The Aims of the PPM Workshop

The aims of the workshop were to explore:

- □ the drivers for new ways of working
- examples of application
- □ wording of documentation
- □ future steps

An advance notice of the workshop was issued in mid 2007 and was updated at intervals as the programme developed.

Sponsors

The workshop was sponsored by **EuroSDR** and **EuroGeographics** on behalf of the European national mapping agencies. . The workshop was also supported by **FIG** and **AGI**. The **Ordnance Survey (GB)** sponsored the workshop dinner.

Workshop Report

The Programme was divided into four separate sessions relating to the primary topic areas:

Opening

- 1. Setting the Scene: An introduction to PPM
- 2. Application of PPM: Experiences of production management
- 3. Challenges and Solutions: Issues to be addressed to ensure success of PPM
- 4. Moving Forward: What needs to be done next to ensure PPM works for all

Sessions 1, 2 and 3 of the programme were followed by twin breakout sessions. These then reported back to the plenary group and the final session (Moving Forward) concluded with a panel discussion.

Generally all the reports demonstrated a level high interest in the topic across participants and a positive need to move forward was identified.

Opening Introductions from Sponsors

<u>Keith Murray</u> welcomed participants on behalf of EuroSDR. He outlined the role of EuroSDR and how it was facilitating discussion on PPM.

Antti Jacobsson, EuroGeographics chair also welcomed participants. He outlined the goals of EuroGeographics in particular its key aim - to identify and promote best practice amongst National Mapping Agencies.

On behalf of the Chair of FIG (<u>Stig Enemark</u>), Keith Murray, after setting out FIG goals, wished the workshop every success.

Les Rackham, AGI/IST36 outlined his role in the Standards community.

Finally Neil Ackroyd, Director of Data Collection & Management welcomed participants on behalf of Ordnance Survey (GB) and identified PPM as one of the strands that is helping Ordnance Survey to become 'the supplier of choice' and a World Class organisation.

Session 1: Setting the scene

As Chair of the opening session Keith Murray started by setting out the aims and objectives of the workshop. The overall aim of PPM is to agree a methodology to better manage roles, responsibilities and stages in managing GI data processing between two parties. The workshop was intended as an opportunity to:

- □ Share our experiences and build consensus
- □ Establish common understanding
- □ Identify priorities
- □ Review the draft management guide
- \Box Strengthen the method(s)
- □ Agree steps to finalise the management guide

<u>Steve Cowell</u>, Ordnance Survey (GB) then presented PPM as a methodology for controlling GI data production, fostering continual improvement within mutually beneficial relationships. The aim being a healthy business relationship between customer and supplier, reduced cost, increased quality and customer satisfaction.

<u>Antti Jacobson</u> presented the results of a recent (September 07) PPM benchmarking exercise that was undertaken by the EuroGeographics data quality team at Ordnance Survey (GB).

<u>Ray Patrucco</u>, Ordnance Survey (GB) introduced the elements included in the draft PPM document and the relationship to existing ISO documentation, in particular ISO19113 and ISO9001.

<u>Wolfgang Kresse</u> discussed the industry use of Standards and how PPM could fit with those Standards.

Breakout Session 1:

The opening breakout session considered the question "How important is standardisation in this [PPM] process?"

Two separate groups reported back their conclusions <u>*Group 1a, Group 1b.*</u> Ray Patrucco and Steve Cowell collated and refined the combined findings as follows:

Key PPM benefits identified:

- D Proposed relationship fosters continuous improvement
- □ Transparency of the relationship between customer and supplier fosters trust
- □ Transparency of the supplier's production process ensures it meets the customer's need
- □ A possible solution to tender pre-qualification
- □ Reduced time from winning a contract to start of production

Key PPM applicability issues identified:

- □ How PPM relates to the processes for acquisition of services (tendering process)
- D PPM seems more relevant to long term relationships than to short term ones
- □ How does PPM work with the use of sub-contractors?
- □ More relevant to bilateral rather than unilateral relationships
- □ Could it work in all cultures and is there multi-lingual requirement?

Key 'Standard' issues identified:

- □ Why do we need PPM if we are ISO9001 certified?
- □ a Framework agreement is implied

Key relationship issues identified:

- □ You cannot force customers to use a standard or guideline
- Customers need to understand their role in the process
- □ It is necessary to avoid the exclusion of others
- □ Some partnerships could lead to the acquisition of the supplier

Suggestions for taking PPM forward:

- Developing PPM as a framework or template (Technical Report) based on best practice guidance rather than a Standard
- There is a need for an international solution
- □ Ensure clarity of the customers role in the process

Session 2: Application of PPM

Les Rackham opened the second session on the Thursday morning. This session which was aimed at presenting supplier and customer experiences of GI data production and then determining if PPM could assist.

<u>Antonio Arozarena Villar</u>, IGN Spain, presented the Spanish collaborative production system, how this worked across different levels of Government and the challenges they faced in ensuring consistency in data quality produced in the regions.

<u>Leen De Temmerman</u>, University of Gent Belgium, provided her experience of GI production management in the Democratic Republic of Congo, particularly in this case of working in remote areas of the country and being required to use existing legacy data of indeterminate quality.

Kristian Teiter, Estonian Land Board presented the Estonian experience through public tendering and state registers. He highlighted that the ability to produce high quality data was at risk due to the annual tendering exercise (a legal requirement). Furthermore when dealing with State registers, responsible for specific datasets, data quality requirements were difficult to impose.

Workshop Breakout 2:

In the second breakout again two groups considered the question relevant to this session: "What are your experiences of GI data supply as a contractor, sub-contractor or data custodian?"

The findings of Group 2a and Group 2b have been collated and summarised below:

Key issues experienced in existing arrangements identified:

- □ Late notification of customer requirements (tendering process is too late)
- □ The lack of pre project or contract communication to encourage understanding of future requirements
- □ Re-tendering following a long contract (framework) and the challenge of encouraging new suppliers into the market
- □ Lack of supply chain visibility hindering the workflow
- A competitive situation (tendering selection process) can lead to tensions and unwillingness to share information
- □ If a contract is not awarded there can be a significant amount of wasted effort spent by the suppliers. This can lead to a damaged relationship.

Key PPM applicability issues identified:

- Customers may not be willing to enter a partnership relationship
- □ Suppliers with no production capability (PPM outsourced or traditional relationship?)
- □ Not useful for the purchase of 'off the shelf' products
- □ How well could PPM apply to different networks? (Government agency, private company, existing and new suppliers)

Key 'Standards' issues identified:

□ Roles need to be defined (eg customer, user, client, custodian, supplier, producer)

Key relationship issues identified:

- □ Commitment and investment from the customer and the supplier is needed for both parties to succeed
- □ The closer the customer is to the supplier processes the likelihood of success is increased (reducing risk)
- □ There is a need for a lead on both sides (customer and supplier) with shared responsibilities
- □ Complex relationships (eg "consortiums") where there is no clear lead across the organisations can cause problems. This becomes more critical in short to medium term contracts

Session 2 (continued)

Further presentations followed the breakout discussions this time the focus was on real experiences of PPM

<u>Ove Steen Kristensen</u>, Chief Project Manager Kampsax presented his experiences of PPM from a supplier perspective. It included a comparison with previous arrangements which highlighted the benefits Kampsax have enjoyed with PPM.

<u>Ian Kirkup</u>, Project manager, Blom talked through his experiences of PPM from a supplier perspective and in particular the benefits which included: reduced costs, increased quality of output, reduction in throughput time and the application of some of the PPM principles to other smaller projects. Moreover elements of PPM have been used as evidence for Blom's successful accreditation to the Investors in People programme.

Session 3: Application of PPM

Wolfgang Kresse chaired the afternoon session which remained on the subject of application of PPM but concentrated on some of the internal workings of the process.

<u>Steve Cowell</u>, Accreditation Management, Ordnance Survey (GB) as a customer in this process provided a worked scenario of PPM with external supplier including roles required to manage PPM effectively. He highlighted the successes that Ordnance Survey had achieved which included a reduction in throughput time and quality assurance costs.

<u>Linda Bruce</u>, Production Manager, Ordnance Survey (GB) provided a view of the process as an internally based supplier. She highlighted the strong continuous improvement ethic and the good working relationship created throughout the supply chain.

<u>Kathy Taylor</u>, Supplier Manager, Ordnance Survey (GB) provided a worked example from a customers perspective working with internal suppliers. How the process has helped to identify improvements and best practice within areas across data processing activities within Ordnance Survey.

<u>Mal Rogers</u>, Operations Development Consultant, Ordnance Survey (GB) demonstrated how process design engineering was key to successful implementation of PPM. He demonstrated some of the tools used to support this design process which included process mapping and the Lean Principles.

<u>Lieven Baeyens</u>, Quality Manager, Tele Atlas presented his experiences which included how TeleAtlas have applied VDA 6.3 (A car industry standard) to accredit suppliers. He was able to show that there was compatibility between this standard and PPM which had been demonstrated by a recent supplier audit of Ordnance Survey (GB).

Workshop Breakout 3: What are the benefits that PPM can bring to your organisation?

In the third breakout the two groups reviewed considered what they had heard and discussed what sort of benefits could be gained by them if applied to their organisation. The findings or <u>Group 3a</u> and <u>Group 3b</u> have been collated and summarised below:

Key PPM benefits identified:

- Common understanding (between customer and supplier) of the customer requirement (including specification and the agreement of Acceptable Quality Levels
- □ More collaboration to produce end product
- □ Opportunity for clarification of customer and supplier roles and responsibilities
- D Provides a structured way for customer and supplier to interact
- D Potential for reduce production time
- Detential for reduced costs for both parties (customer and supplier)
- □ Increased consistency from suppliers and increased ability to get it 'right first time'
- □ Use of lessons learned to develop and improve the production
- □ Lowering risks (customer and supplier)

Key PPM applicability issues identified:

- D Particularly useful for new ventures and projects
- □ Less useful with suppliers with standard 'off the shelf' products or datasets. The level of quality produced should be fit for the customer's purpose and that 'one size does not fit all'
- D Business models may not be aligned, particularly with multiple customers
- □ Before applying PPM the likely return on investment must be considered against the perceived benefits.
- □ PPM can be seen as a tool for managing risk and that PPM need only be applied to the level that satisfactorily mitigates that risk.

Key relationship issues identified:

- □ There is a risk that if more value can be seen to be gained by Customers/Clients this will put the good customer supplier relationship under strain
- □ Good management, leadership and stakeholder buy-in is essential to ensure success
- □ Communication between the customer and the supplier should start as soon as possible during any process

Suggestions for taking PPM forward:

- D PPM more useful as a framework
- □ Identification of roles and responsibilities are important
- □ Can open source collaboration (sharing free) be applied here?
- Learn from other industry Standards (other examples)
- □ Identify best practice examples (case studies)

Final Session: Moving forward

Antti Jacobson chaired the final session on the Friday morning. With some initial presentations from software vendors the emphasis was on data quality with later sessions looking to sum up the event and agree a way forward for PPM.

<u>Michael Sanderson</u>, Director 1Spatial, presented on the importance of data quality throughout the supply chain and how vendors can provide testing solutions including Web based services.

<u>Peter Hanson</u>, Infotech Enterprises Europe Ltd InfoTech discussed the data quality lifecycle and in particular he identified that data quality and the continual improvement of quality, needs to be recognised to be part of every interaction with the data: applications, processes and people.

Panel Discussion

A panel consisting of Steve Cowell, Ray Patrucco, Les Rackham and Wolfgang Kresse, chaired by Antti Jacobson took questions from the floor. The panel discussion covered several <u>issues</u> complementary to the discussion from the earlier break out sessions.

Conclusions and Actions

The workshop created much discussion and debate on applicability and scope (as identified in this document). The workshop also put forward suggestions for the development of PPM.

The workshop agreed that all parties involved in the production of GI want a successful outcome but it was clear from the workshop discussion that the customer and supplier have different perspectives. However it was possible to identify that there are some shared benefits of using PPM:

- Greater confidence in the relationship
- Greater clarity in risk management (risk mitigation) including less risk of work not being accepted.
- High investment cost could increase the risk but if the level (of PPM application) is kept in proportion (with requirement) successes can be achieved.
- Shared risk through partnership (A current perspective is that customers share risk whilst suppliers have risk 'dumped' on them)
- Better service (both ways)
- Start-up delays reduced

With investment of an appropriate level the customer will receive the product required (with respect to cost, timeliness and quality).

By the end of the workshop it was accepted that the benefits demonstrated by Production Programme Management could be gained by both data suppliers and customers across the industry. Ordnance Survey and its suppliers were able to demonstrate clear advantages over previous arrangements.

The outcome of the workshop was that the Production Partnership management document would be redrafted so it is suitable for consideration by the relevant ISO Technical Committee (TC211). The issues identified by the workshop would be tackled as part of the redrafting. The document will be submitted for inclusion into the body of ISO documents supporting Geographic Information.

In closing Antti Jacobson led the whole group in identifying the way forward:

- It was agreed that PPM should be developed towards an ISO Technical Specification or Technical Report. This would require:
 - o a New Work Item Proposal
 - o Project editor and project leader
 - Core Team to prepare the document
 - o Review Team
- The core team will be made up from the following membership to be nominated by the ISO participating members). This team will support/produce the next version of the PPM document in an ISO document format:
 - Antti Jakobsson (project leader)
 - Ray Patrucco (project editor)
 - Steve Cowell
 - o Peter Hansen
 - o Prasad Ravinder
- The workshop attendees and other interested parties will be offered the opportunity to review the document (by email) prior to any submission.
- We require support from at least 5 countries with voting rights represented in TC211.
- Issues, comments and suggestions raised during the workshop will be considered in the drafting of the new PPM document.
- The document will be supported by case studies. Steve Cowell will lead on this aspect with completed cases available by September 2008. Case studies will be supported by:
 - o 1spatial
 - o TeletAtlas
 - Ordnance Survey (GB)
- The PPM Technical Report will be available by the end of March 2008 to enable introduction into the ISO process in Spring 2008. Proposed case studies will be identified at this stage.

The next ISO TC211 meetings were identified:

- May 2008 Copenhagen
- o Dec 2008 Japan

Annex – Workshop attendees

First Name	Surname	Organisation	Position/Department	Country
Leen	De Temmerman	Ghent University	Scientific Researcher - Geography Department	Belgium
Eric	BAYERS	IGN	Director of the SDI	Belgium
Jean	THEATRE	IGN	General Advisor	Belgium
Lieven	Baeyens	Tele Atlas Data Gent NV	Quality Manager	Belgium
Ove Steen	Kristensen	Cowi A/S	Chief Project Manager Mapping	Denmank
Kristian	Teiter	Estonian Land Board	Head of Department of Geoinformatics	Estonia
Antti	Jakobsson	National Land Survey of Finland	EuroGeographics	Finland
Pätynen	Veijo	National Land Survey of Finland	Senior Application Specialist	Finland
Hubert	MINTEN	Eurosense GmbH	Directing Manager	Germany
Christian	Elsner	Landesvermessungsamt Nordrhein-Westfalen		Germany
Wolfgang	Kresse	University of Applied Sciences, Neubrandenburg	EuroSDR, ISO/TC 211	Germany
John	McCreadie	DSM Soft (P) Ltd		India
Avinash	MV	DSM Soft (P) Ltd		India
Ravinder	Prasad	DSM Soft (P) Ltd		India
Janis	Strsuhmanis	Riga Technical University	Department of Geomatics	Latvia
Carol	Agius	Malta Environment & Planning Authority		Malta
MARIA	PLA	Institut Cartografic de Catalunya		SPAIN
Antonio	Arozarena	Instituto Geografico Nacional	Assistant Mananger	Spain
Leslie	Rackham	AGI (IST/03) British Standards Committee		UK
Paul	Crisp	Blom Aerofilms	Senior Project Manager	UK
lan	Kirkup	Blom Aerofilms	Project Manager	UK
Julian	Millard	Blom Aerofilms	Quality Assurance Manager	UK
Mike	McKay	COWI A/S Mapping UK	Managing Director	UK
Peter	Hanson	Infotech Enterprises Europe Ltd	Senior Project Manager, Geospatial Data Services	UK
Michael	Sanderson	1Spatial Group Ltd	Chief Executive Officer	UK
Steve	Cowell	Ordnance Survey Great Britain	Accreditation Manager	UK
Jonathan	Holmes	Ordnance Survey Great Britain	Senior Data Consultant	UK
Keith	Murray	Ordnance Survey Great Britain	Head of GI strategy	UK
Ray	Patrucco	Ordnance Survey Great Britain	Standards & Compliance Manager	UK
Mal	Rogers	Ordnance Survey Great Britain	Operations Development Senior Consultant	UK
Linda	Bruce	Ordnance Survey Great Britain	Data Enhancement Quality Improvement Manager	UK
Kathy	Taylor	Ordnance Survey Great Britain	Accreditation Team Manager	UK