

SRC - Joint Work Plan

April 2011

System Operator

18/04/2011



*Keeping the lights on
24 hours a day, 7 days a week*

SYSTEM OPERATOR

Keeping the energy flowing

TRANSPOWER



TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	3
2	PURPOSE	3
3	REGULATORY FRAMEWORK AND DRIVERS	3
4	JOINT PLANNING FRAMEWORK	4
5	CHALLENGES.....	5
6	JOINT INITIATIVES	5
7	CONCLUSIONS	6

1 Executive Summary

The Electricity Industry Participation Codes and the System Operator Service Provider Agreement require the Electricity Authority (Authority) and the System Operator to take a joint approach to planning. A Joint Development Programme must be published annually and reflect the industry initiatives involving the System Operator and relevant items on the System Operator Capital Plan.

Significant effort by the Authority and the System Operator has been put into the joint planning process. To date, focus has necessarily been short term and individual project based whilst joint projects have been set up and processes in both organisations implemented. Attention is now to turn to developing a Joint Development Programme that spans at least three years to coincide with the period of the Capital Plan submitted by the System operator to the Authority.

Representatives from both organisations have identified two major challenges:

- The need to identify the phasing of all System Operator IT projects, the majority of which are not monitored as part of the Joint Work Plan
- The desire to determine the correct phasing of the market-related projects when design and scope stability is unlikely to be achieved whilst active industry consultation is occurring.

Focus will now be on addressing and overcoming, to the extent practicable, the above challenges and putting together a Joint Development Programme with as much accuracy as available information will allow. The aim is to publish the Joint Development Programme required under the Codes no later than 30 June 2011 to coincide with the next financial (and CAPEX) year.

2 Purpose

This paper describes the framework set up between the Electricity Authority and the System Operator to produce, monitor, and execute a Joint Development Programme and outlines some of the key challenges in implementing such a programme.

3 Regulatory Framework and drivers

The System Operator Service Provider Agreement (SOSPA) requires the System Operator to produce a draft business plan that reflects industry requirements and submit that plan to the Electricity Authority (Authority) for comment prior to it being made final.

In addition, the System Operator is required to produce an annual Capital Plan (CAPEX Plan) that reflects the intended Capital expenditure for the next three years. The draft CAPEX plan is submitted to the Authority for comment at the same time as the draft business plan. The CAPEX Plan reflects the development items in the business plan, encompassing industry initiatives, the System Operator allocation of Transpower corporate software development requirements, essential software development required to maintain the market system, and initiatives deemed important to delivering the System Operator role under the Codes.

Clause 7.7 of the Electricity Industry Participation Code requires the System Operator and the Authority to agree and publish a joint development programme each year that coordinates and prioritises industry development items and the items on the CAPEX Plan. Discussion and agreement of industry development

plans and priorities takes place to arrive at a joint view with respect to those plans and priorities, and reflect that view in a development programme with key activities, priorities, milestones and deliverables.

The development process required to enable the Joint Development Programme to be compiled and delivered requires the System Operator and the Authority to work together to make a plan that recognises and considers priorities, resources, and other constraints such as industry requirements for consultation and feedback.

The Joint Development Programme is a small subset of the overall work being carried out by the System Operator and the Authority. The items on the Joint Development Programme are the initiatives from the two organisations that are of joint interest such as industry initiatives and items that, because they require extensive System Operator resources, could impact upon delivery of those initiatives and hence the programme.

4 Joint Planning Framework

To facilitate the joint planning process, the EA and the System Operator have set up a cross-functional team (Joint Work Planning Team) reporting to the General Manager, System Operations and the Chief Executive, Electricity Authority, and consisting of key stakeholders from each organisation, including key IST staff from Transpower.

The Joint Work Planning Team is responsible for jointly agreeing, maintaining, and communicating a development plan that reflects industry development needs and priorities, whilst enabling both the Authority and the System Operator individual business needs. Implicit in the role of the Joint Work Planning Team is the requirement to jointly determine and apply prioritisation criteria, identify and resolve (to the extent practicable) resource conflicts, and monitor progress of the items comprising the Joint Development Programme to enable management and reporting of the work programme.

Terms of Reference and Joint Work Planning Guidelines have been developed and agreed to enable the process.

The intended planning horizon for the Joint Work Planning Team is 3 years to coincide with the CAPEX Plan timeframes. Particular and more detailed publication is likely to be the first 18 months of that period as resources are able to be better defined and project certainty improves. Work by the Joint Work Planning Team over the last six months has necessarily focussed on individual project issues and a much shorter timeframe than ideal. This is because projects have needed to be set up and strict joint project management disciplines and processes have needed to be implemented in, and between, the Authority and the System Operator.

As most projects on the Joint Work Plan have been initiated and are progressing, attention can be focussed on programme management and planning over a longer term horizon. A significant amount of effort will be required by both organisations over the next couple of months to more accurately define the content and scheduling of the Joint Development Programme to enable industry publication in late June 2011.

5 Challenges

The production, publication, and monitoring of the Joint Development Programme raises some significant challenges for both the Authority and the System Operator.

The delivery of a Joint development Programme is contingent upon defining and resolving key constraints that manifest over the programme duration. Such constraints include:

- Code constraints – identifying where parallel coding can, and cannot take place.
- Environment constraints – identifying where projects need to use test environments at the same time.
- People constraints – identifying projects requiring more people of the same skill set than what is available.

Consequently, the Joint Work Planning Team has identified the following two significant pieces of information it requires before it can produce a deliverable programme:

- a) Visibility and phasing of all software changes required during the planning horizon is needed. For example, the lifecycle maintenance and other projects deemed critical to ensure the correct functioning of the market system are not monitored as part of the Joint Development Plan but are a key input to establishing project phasing and resource availability for all projects of mutual interest which comprise the Joint Development Plan.
- b) Sufficient detail of the market changes (such as FTRs and Scarcity Pricing) is required to enable design work to commence. The current market projects still have industry consultation requirements meaning they cannot be reliably programmed and resources and resource constraints identified.

A significant amount of effort will be required by both the EA and the System Operator to meet the above challenges and obtain sufficient information to enable a longer term Joint Development Programme to be produced that provides a reasonable level of information to the Board and the industry about the likely project implementation dates over the next three years.

6 Joint initiatives

The following initiatives are currently included on the proposed Joint Development Plan for the next 18 months.

- AGC – Automated generator control: Developing systems to coordinate multiple frequency keepers
- A review of normal frequency requirements and standards
- A review of under-frequency arrangements including AUFLS requirements and reserves
- Scarcity pricing
- Dispatchable Demand
- Demand side bidding and forecasting
- Development of LRAs/FTRs to management locational pricing risk
- HVDC Pole 3 implementation
- Variable Line Ratings

7 Conclusions

The Authority and the System Operator have put in a significant amount of effort over the last 6 months to implement joint processes and disciplines to work planning. There are some significant challenges within and between both organisations to overcome to enable a deliverable Joint Development Plan to be created and maintained. However, there is a high degree of confidence between the Authority and the System Operator that such challenges can be overcome and a realistic Joint Development Plan published by 30 June 2011.