# **ORSNZ Interest Groups (IGs)**

*Disclaimer.* This doc is an integration of thoughts from Grant Read, Sarah Marshall, Mike O'Sullivan and Tony Downward. Prepared by Mike O'Sullivan.

# Motivation

- 1) Quick informal lightweight way of exchanging information about events, people, presentations and projects
- 2) Open mechanism to encourage both on-line interaction and actual face-to-face meetings
- 3) Basis for putting together and/or publicising, more formal workshops, conference sessions, etc
- 4) Way to increase relevance, engagement with industry as well as regional activity
- 5) Pathway to access ORSNZ funding to support activities

# **User Requirements**

- 1) A group name, probably better to keep this broad, e.g., ORSNZ Energy and Environment Interest Group (EEIG or IGRE) this includes electricity and water for example
  - a. Also broadens ability to engage with industry. For example, a recent water markets book launch could easily have been sponsored by an ORSNZ EEIG group, but not really an "electricity" group, because it's not about "electricity"
- 2) An internet presence including an on-line forum with an individual responsible for moderating a forum
- 3) A small committee (steering group) responsible for initiatives in the area

## **Internet Presence**

Note An example IG is available at http://orsnz.org.nz/igre

The plan is all interest groups (including regional ones) will have their own webpage, with a number of people approved to add posts. These posts will fall into either the Category of 'News' or 'Event'.

Individuals can either sign up as a full ORSNZ subscriber and receive email updates on news (categorised by interest group) or sign up for separate interest group emails.

When an interest group is approved (see Structure below), the Secretary will clone a template website (with address www.orsnz.org.nz/<Interest\_Group\_Name>), add this interest group to the ORSNZ aggregate RSS feed; and clone the MailChimp campaign to enable people to subscribe to just this group (with emails scheduled to go out weekly, at a particular time, if something is posted.)

#### **User Requirements – Internet**

- 1) A keyword with which to tag all communications of interest to that group
- 2) Brief emails arriving to let me know about new posts/items of interest
- 3) Links taking me to an on-line forum of some kind that provides a record of discussions, and links to related items (see Internet Presence below)
- 4) A clear and simple way of submitting my own items
- 5) Guidelines with respect to what can, or cannot, be posted. Keep discussion positively focused on the OR aspects, not politics, personalities, or commercial rivalries

### Structure

ORSNZ council (or this sub-committee) needs to determine:

- Process for setting up IG
  - What is required?
  - Web page (sub-site) set up (see Internet Presence above) and should have
    - § Responsible/Contact person
      - § Group name
      - § Brief (1-2 sentence) description of the group
      - § Aims & objectives of the group (e.g. https://www.theorsociety.com/Pages/SpecialInterest/Health.aspx)
      - § Info about events
      - § News (perhaps initially accessible through the appropriately tagged items on the "general" news page
      - § Info about members (perhaps not about individuals, but a brief statement about the group e.g. 25 members from the Universities of X and Y and 5 from industry)
- Mechanism for approving IGs
  - Council vote? Approved by a subset of the council (perhaps President, Secretary + 1 other)?
- Mechanism for approving funding
  - IG contact person should provide an overview of the event and budget, and the event would need to be advertised on the website
  - Council vote? Approved by a subset of the council (perhaps President, Treasurer + 1 other)?
- Budget for SIGs
- Guidelines as to what requests might reasonably be considered.
  - Remark SIGs could seek sponsorship for group and society activities from their industries, e.g., the ORSNZ EEIG invites you to the XYZ corp special ORSNZ conference session on abc, featuring the distinguished professor brought in, at the expense of XYZ (refreshments will be provided) – this kind of activity may have benefits for ORSNZ as a whole

Getting Interest Groups started should be doable without any major commitment (e.g., financial) from ORSNZ.

Group coordinator/committee left to come up with initiatives and make proposals to the society, e.g., "we'd like to put together a workshop associated with the next conference", "we'd like some money to host an event", etc.

Regional Branches will become Regional Interest Groups with the Regional Contact as the moderator.

### **Examples of Possible Interest Group Communication**

#### (from 22/6/2017)

#### Water Markets Book event, University of Canterbury, July 18

Springer has just released a book on Smart Markets for Water Resources (link) by ex Canterbury OR lecturer Fritz Raffensperger (link) and his Canterbury engineering colleague Mark Milke. Dr Eric Crampton (link) will speak speaking a book launch event at the University Staff Club on Tuesday July 18, 5:30 - 7 pm (link), to which you are warmly invited. Although the topic might not sound like "OR", the book advances the proposal that large scale optimisation models be used as a basis for establishing markets to trade water, and perhaps water borne pollutant quotas, as currently occurs in the electricity sector. It is largely based on several years of research in the Water Markets Research Group (WMRG) within the former MSCI group (link) at Canterbury, which in turn built upon work done by the EMRG group there (link). (for EEIG and Canterbury interest groups)

#### Modelling for Renewable Energy Development in the Pacific

The World Bank has just announced (link) its support for the \$200m Tina River Hydro project (link) to boost electricity supply to the capital of the Solomon Islands, Honiara (link). The decision to proceed was based on modelling work undertaken by Grant Read (link) and Ramu Naidoo (link) here in NZ, who developed an optimisation model of electricity sector development options under a wide variety of scenarios. Although only "small hydro" by NZ standards, this project is expected to play a central role in development of the sector (approximately double current capacity) and thus in national development, in a country where only 9% of the population are connected to the grid, which currently relies almost entirely on Diesel fired generation. The model had to account for unusually tight interactions between load and energy output, and the ancillary service support provided, or required, by hydro, diesel, solar, batteries and potentially geothermal in this small isolated system. Ramu and Grant hope to present something on all this at the upcoming EPOC workshop (link) and/or ORSNZ conference (link). See you there! (for EEIG)

#### Visit by Prof abc

Hi all, Prof abc (link) of xyz (link) will be visiting us here at uvw (link) from xxx to yyy. He is well known for his work on xxx (link), and will be presenting a talk on the topic (link) at xxx on yyy (link). He would really like to interact with local researchers while here, and will be free to travel to other centres between 123 and 456. Please contact prof xyz, or myself (link), if you have issues you would like to discuss, or would like to arrange a visit, seminar etc. . And/or come and join us on 123, for lunch at abc (link),

#### Student project

Jo Blow (link) is doing project on xyz, supervised by prof abc (link) You can see the proposal here (link) and a preliminary presentation here (link). She/he will be making a further presentation in room 123 of xyz, at 345, but would really like talk with anyone who can provide data on 123, or ideas with respect to modelling fgh, ASAP

#### Wellington Lunch

So&so (link) will be in town tomorrow, so abc (link) and def (link) plan to get together with him/her for lunch at abc (link), to chat about the possibility of developing models for tyu ....We are NOT shouting lunch, but feel free to join us

#### Conference session on abc

We (link) and (link) are thinking of organising a session on abc at this year's ORSNZ conference. We already have papers from (link), (link) and (link), but would welcome more. If there is enough interest we'll try to set it up as a workshop stream, so please let us know if you'd like to contribute by 123.

#### Calculation of xyz

Can anyone help with optimisation approaches to calculating xyz? It seems that recent analyses by xxx (link) have been based on formulae derived from quite early literature, including (link), (link) and (link), which pre-date the development of computers, let alone modern optimisation techniques. So far as I can see the proper way to do the calculation is as follows, but this does not seem to have been a very sexy research area over the last few decades, and I have not found a formal reference to anyone doing it this way. Can anyone point me in the right direction?