



**RTK CORs Forum**  
FIG Congress 2006, Munich, Germany.  
Monday 9 October 2006

List of potential FIG roles, with respect to RTK CORs, for consideration by the Steering Committee -

- Facilitate development of standards / guidelines– site, monumentation, hardware, fundamental (IGS) vs CORs sites and then other, density, how many stations to be IGS
- Provide best practice guidelines, surveying methodologies, field operations for RTK CORs users and providers
- Facilitate the collation of data (?), experience, information, providers, and users (?) via a database.
- Educate and promote to surveyors RTK CORs through information exchange forums, technical sessions, workshops and internet. That is conduct forums on technical or related issues wrt RTK CORs, in particular ambiguity resolution, antenna, multi-pathing, atmospheric, heighting, relating CORs to a reference frame, operations etc etc
- Facilitate forums on overcoming communication issues – ie GPRS, GSM, NTRIP connections
- Facilitate forums on overcoming complex IT issues – ie external users access to services and also from a providers installation and maintenance perspective.
- Facilitate the compilation of the why and how to connect RTK CORs networks to ITRF
- Facilitate forums on the legal issues (cadastre) wrt RTK CORs networks ie legal traceable measurements, calibration, verification of points, best practice, validation networks to check software and techniques.
- Facilitate discussions on the roles / involvement of private, public and other agencies.
- Facilitate discussions on the development of business cases for establishing CORs and business models.
- Facilitate representation for RTK CORs providers / users to ‘voice’ or lobby their wants / needs to GNSS owners, telecommunication agencies, GNSS equipment and software manufacturers / suppliers, IGS

Other issues raised in forum -

- Who should run the RTK CORs networks ?  
What management model should be used ? partnership, public private ?  
What service and data management models should be used ?  
Pricing models ?

Should business models other than survey type models be used to handle RTK CORs services ? ie a telecommunications

- Should GRAVITY measurements be observed at all CORs locations and be made available for gravimetric geoid modelling ?
- From discussions, IAG / IGS role is to provide a seamless global reference frame validated by analysis centres (ITRF) and also to facilitate the science and research aspect ie global. Where as FIG is the link between the scientific community and the end user, surveyor. So FIG's role is to facilitate the implementation and operation of RTK CORs with respect to resourcing, management, promotional and technical issues.
- Discussions were also about other services that CORs can provide such as DGPS, dissemination of raw data (RINEX files), and NTRIP
- Should the term 'Positioning Infrastructure' be used and it's role defined and explored. Subsequently, should there be a greater focus on applications and innovative applications.

Commission 5 comments on "New Positioning Techniques including Infrastructure"

- Installation of a Special Study Group under an existing wg f.e. 5.3 "Mobile Mapping".  
Chaired by .....
- The SSG will be included in the updated work plan
- Actions within the SSG
  - 1. prepare the creation of a working group – representatives from manufacturers, academics, surveyors, communications industry, Sister-Organizations**
  - 2. facilitate forums on this topic and relevant symposiums**
  - 3. address standards and best practice guidelines**
  - 4. disseminate information – website portal, newsletters**
  - 5. instigate and facilitate discussion**
  - 6. produce a 'dynamic' publication including a dictionary explaining all the different Technologies**

The forum's purpose is to identify and define the technologies and issues and propose the role, function of an FIG Working Group