



上海交通大學

SHANGHAI JIAO TONG UNIVERSITY



WG-B Application Subgroup

GNSS Application Questionnaire R&D Status Update

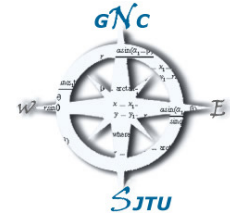
Xingqun ZHAN, Maolin CHEN

Shanghai Jiao Tong University, China

8, June, 2016



OUTLINE

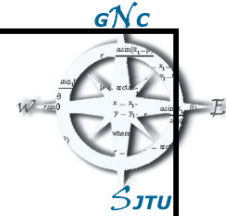


1. Background

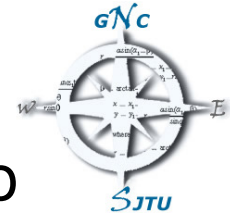
2. GNSS Application Questionnaire

3. Future Plans

Overview of App SG Meetings



Meeting	Venue	Date	Theme	In conjunction with
1st	Munich, Germany	2012/3/12~13	Mass Market Liability	Munich Summit 2012
2nd	Wuhan, China	2013/5/14	Surveying Disaster Management Maritime Liability	China Satellite Navigation Conference 2013
3rd	Daejeon, Korea	2013/7/18	Mass Market Disaster Management Agriculture Surveying Timing	National GNSS Research Center Symposium 2013
4th	Jeju, Korea	2014/10/22	SBAS Surveying Mass Market Disaster	International Symposium on GNSS 2014



1. Background (1/4)

Several core applications were identified by App SG to monitor, such as, Disaster management, Personal Navigation, Transportation, Surveying, Agriculture, Liability Applications, Timing

Dominant subject (presentation numbers):

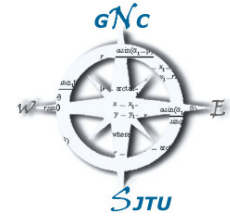
Disaster management	30%	Transportation	13%
Personal Navigation	30%	Surveying	13%

Notice :

Indoor – Outdoor Seamless PNT services are highly required for disaster management, personal navigation and etc.

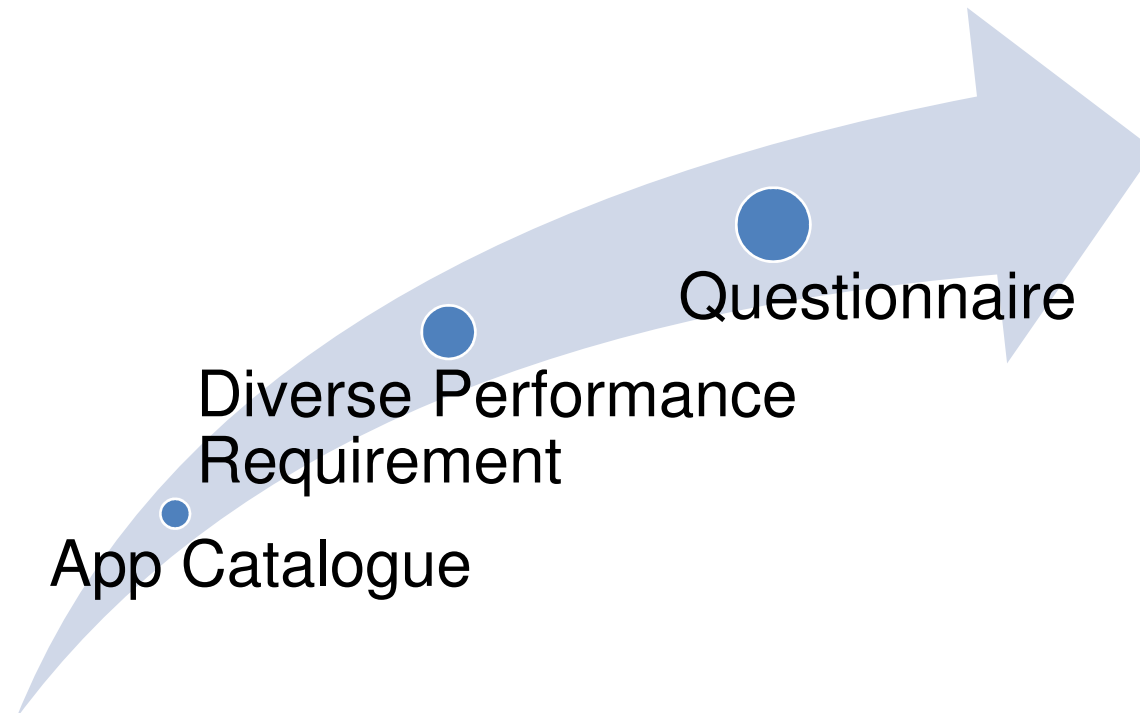
Multi-GNSS is effective for improving the availability.

High precision positioning (~cm-level) is required for some APPs.

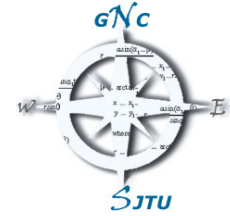


1. Background (2/4)

Distinct performance are required in different services

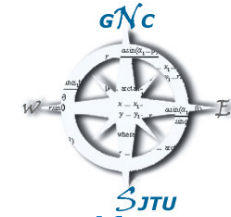


1. Background (3/4)



Objectives:

- *Identify GNSS performance requirements in various domains*
- *Link user requirements with industrial circles*
- *Offer suggestions to GNSS service and product providers*



1. Background (4/4)

<http://www.unoosa.org/pdf/icg/2015/icg10/wg/wgb01-1.pdf>

GNSS Application Requirement Questionnaire

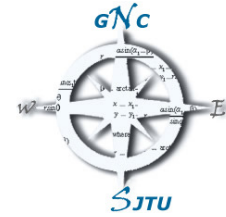
No.	Questions
1	My application domains mainly within:
	<input type="checkbox"/> Science <input type="checkbox"/> Education <input type="checkbox"/> Transportation <input type="checkbox"/> Astronautics <input type="checkbox"/> Timing <input type="checkbox"/> Monitoring <input type="checkbox"/> Surveying <input type="checkbox"/> Aviation <input type="checkbox"/> Meteorology <input type="checkbox"/> Hydrology <input type="checkbox"/> Agriculture <input type="checkbox"/> Disaster Management <input type="checkbox"/> Personal Navigation Others: _____

No.	Questions
16	What could be suitable channel to collect and deal with the end-user comments and suggestions?

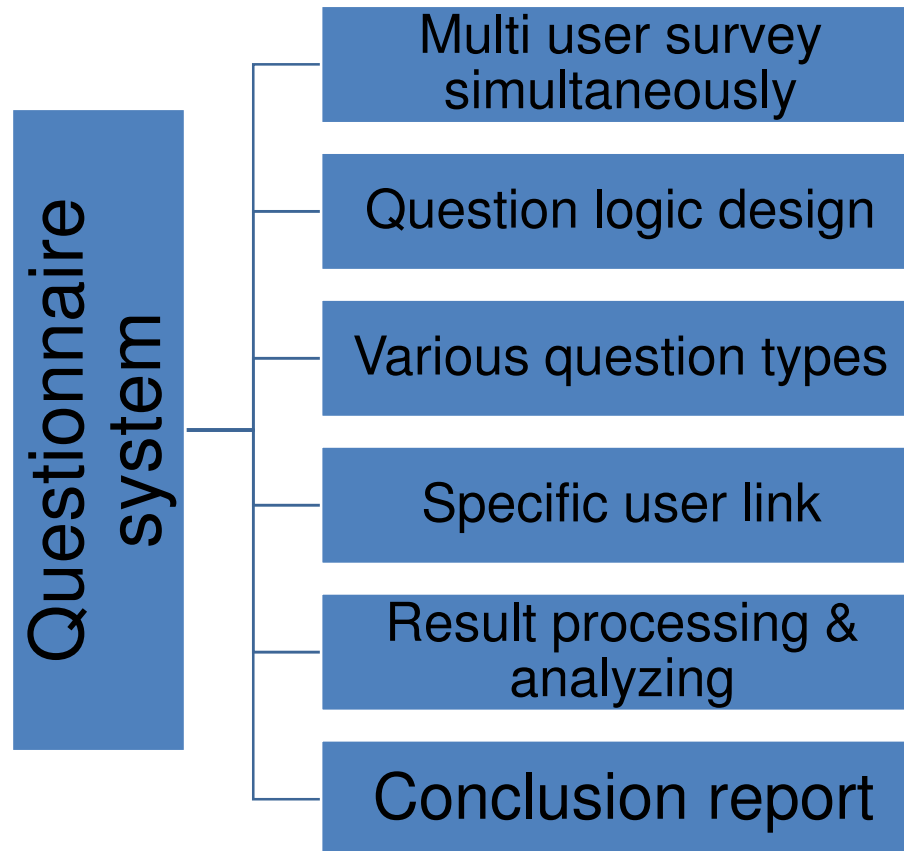
My name:		Affiliation:	
Tel:		Email:	

Thank you for your answers for the questionnaire!

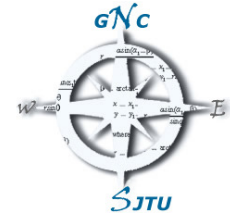
2. GNSS Application Questionnaire(1/7)



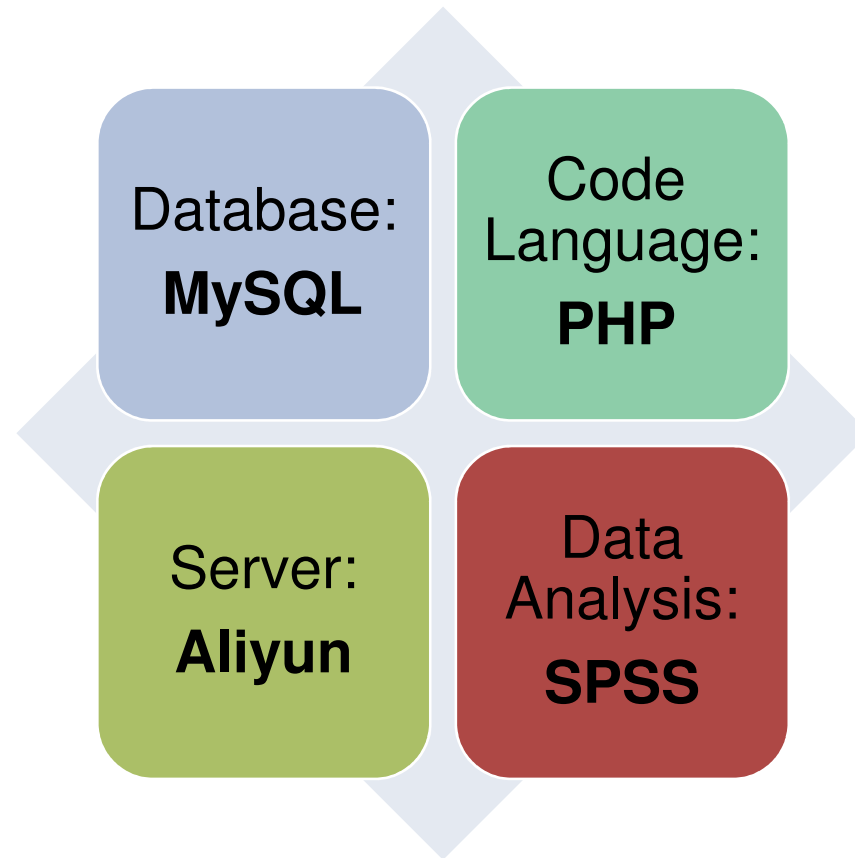
System Functions:



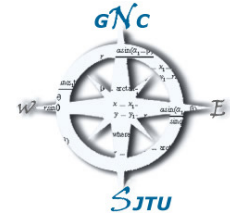
2. GNSS Application Questionnaire(2/7)



System Architecture:



2. GNSS Application Questionnaire(3/7)

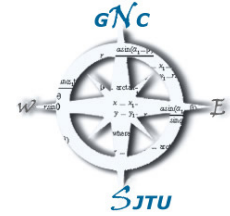


Question Classification:

- *User Background Investigation*
- *Public Questions*
- *Industry Catalogue Questions*

- *Test Questions*
- *Personal Information Collection*

2. GNSS Application Questionnaire(4/7)



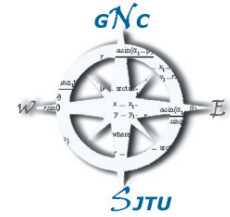
Questionnaire Logic:

- User Background Investigation*
- *Public Questions*
- *Industry Catalogue Questions*

User Background Investigations:

- *Personal Background*
- *Applications*
- *Products*
- *Degree of Satisfaction*

2. GNSS Application Questionnaire(5/7)



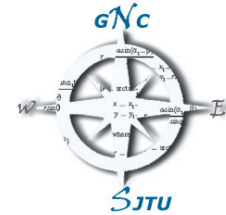
Public Questions:

- *Accuracy, Integrity, Availability, and Continuity*
- *Fusion Navigation*
- *Vulnerability*

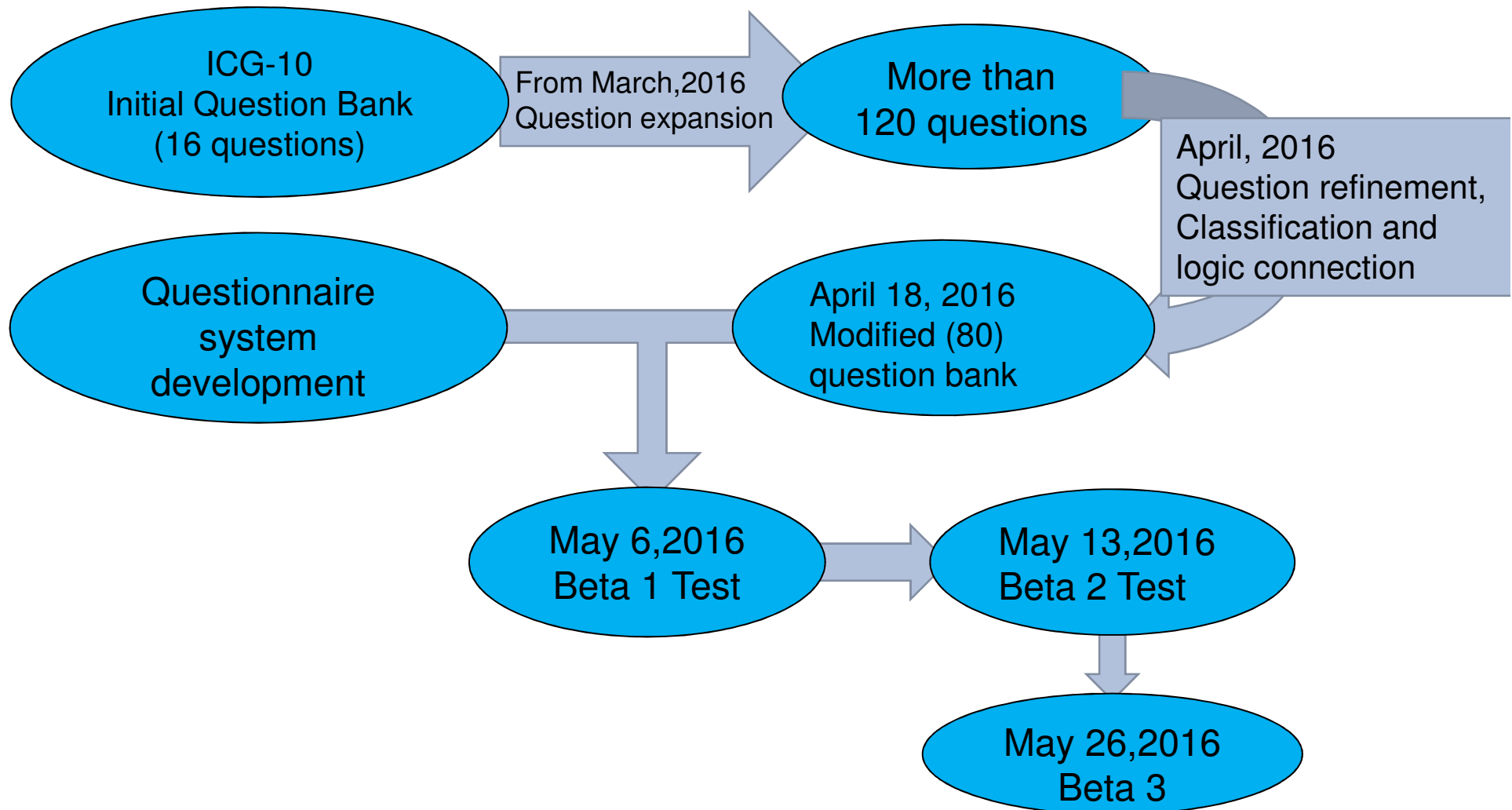
Industry Catalogue Questions:

- *Aviation*
- *Agriculture*
- *Astronautics*
- *Personal Navigation*
- *Surveying*
- *Timing*
- *UAV*
- *...*

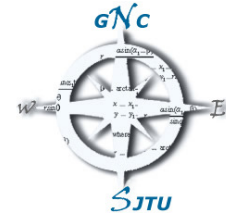
2. GNSS Application Questionnaire(6/7)



R&D Status:



2. GNSS Application Questionnaire(7/7)



Welcome Page:

GNSS Application Requirement
Questionnaire (beta3)

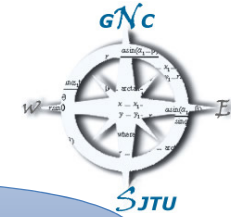
Load unfinished survey

Exit and clear survey

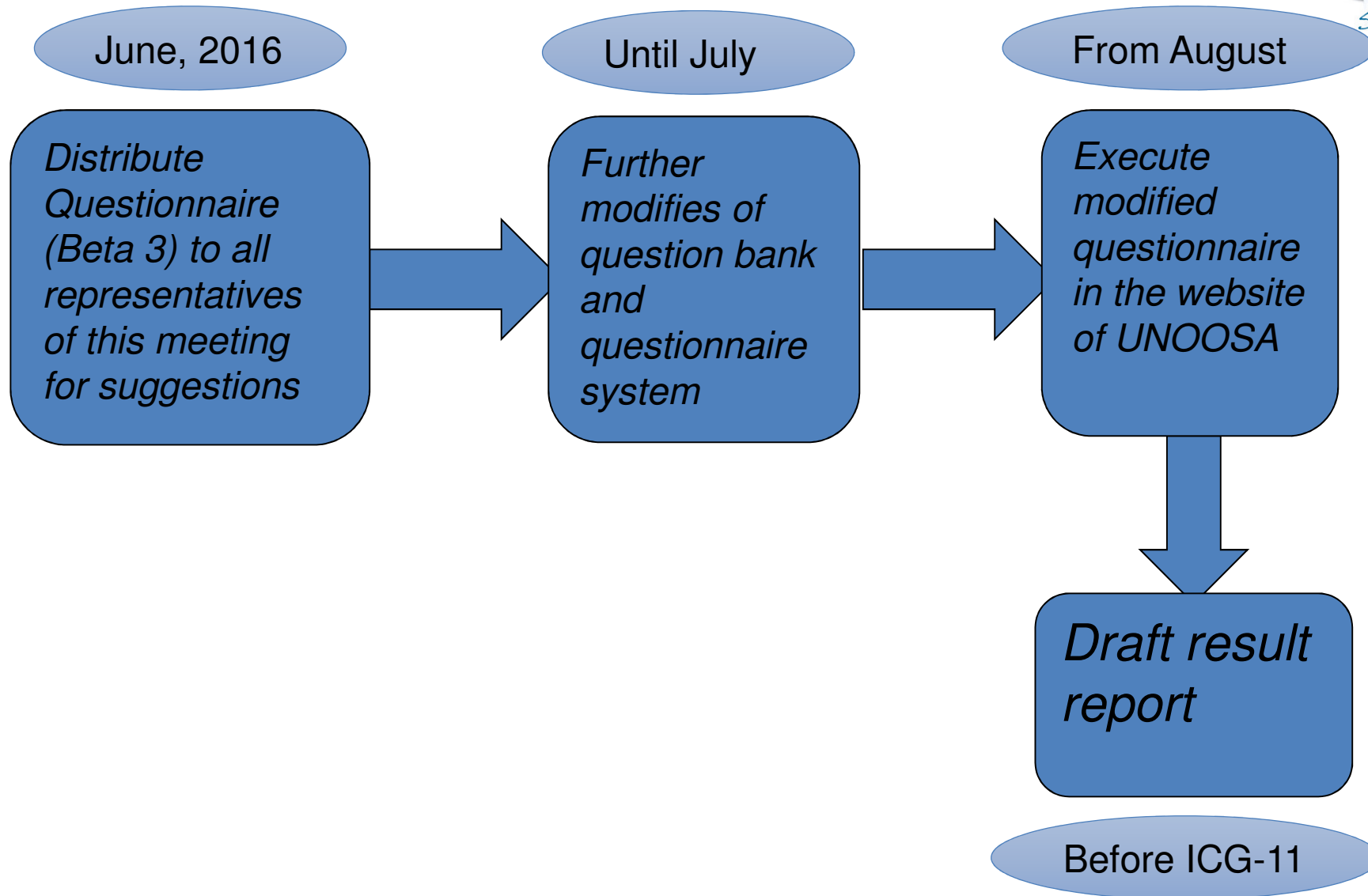
GNSS Application Requirement Questionnaire (beta3)

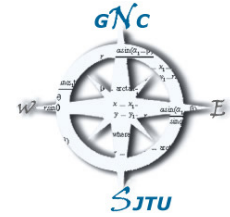
This is a GNSS application requirement and satisfaction degree questionnaire! Thanks to the supports from United Nations Office for Outer Space Affairs, the questionnaire is to provide a necessary input for International Committee on GNSS Service Performance Enhancement Work Group Application Subgroup to finalize a report of GNSS Application Catalogues. We sincerely appreciate your valuable contributions, and all your opinions and information would be processed seriously! Thank you!

Welcome!



3. Future Plans





*THANKS VERY MUCH
FOR YOUR ATTENTION*

<http://121.42.29.87/index.php/638953?token=270KYstjy24SWqd&lang=en>

