



XXVII FIG CONGRESS

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for the future –
Geospatial excellence
for a better living

Update on ETCB Global Survey `Reference Frame Competencies`

Presenter:

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UN-GGIM
UNITED NATIONS
COMMITTEE OF EXPERTS ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT

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Global Survey – Reference Frame Competency

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**United Nations Global Geospatial Information Management
Sub-Committee on Geodesy (UN GGIM SCOG)**



Motivation for the Reference Frame Competency Survey

February 2015 – UN General Assembly adopted the resolution “A Global Geodetic Reference Frame for Sustainable Development” – the first resolution recognizing the importance of a globally-coordinated approach to geodesy.

UN-GGIM SCoG’ WG ETCB was tasked to create:

- A Global Survey of Reference Frame (RF) Competency – open from early 2018 for 22 months

Goal: Implement a self-assessment by Member States of their competency creating, maintaining and improving their national reference frames

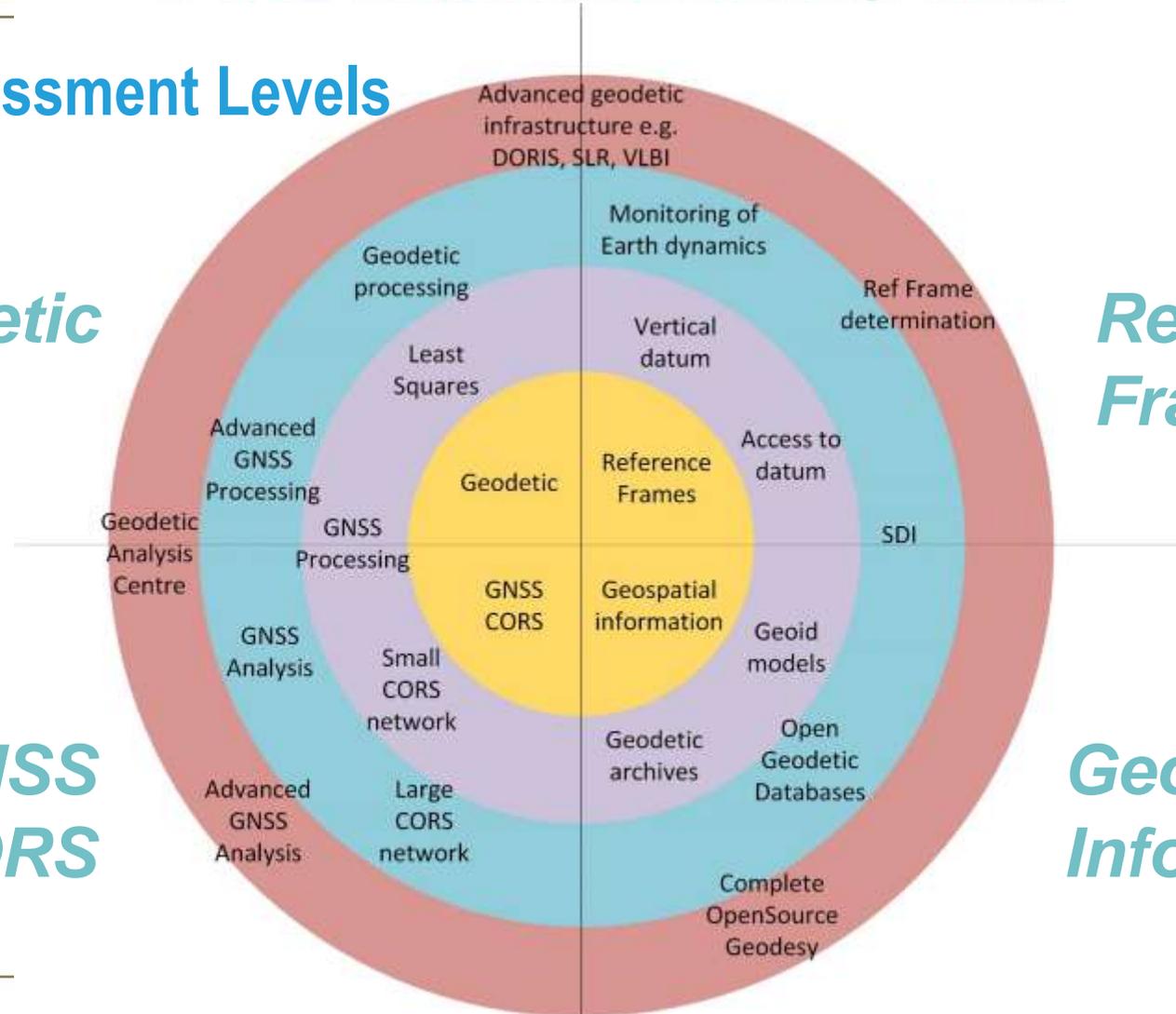
Competency Assessment Levels

Geodetic

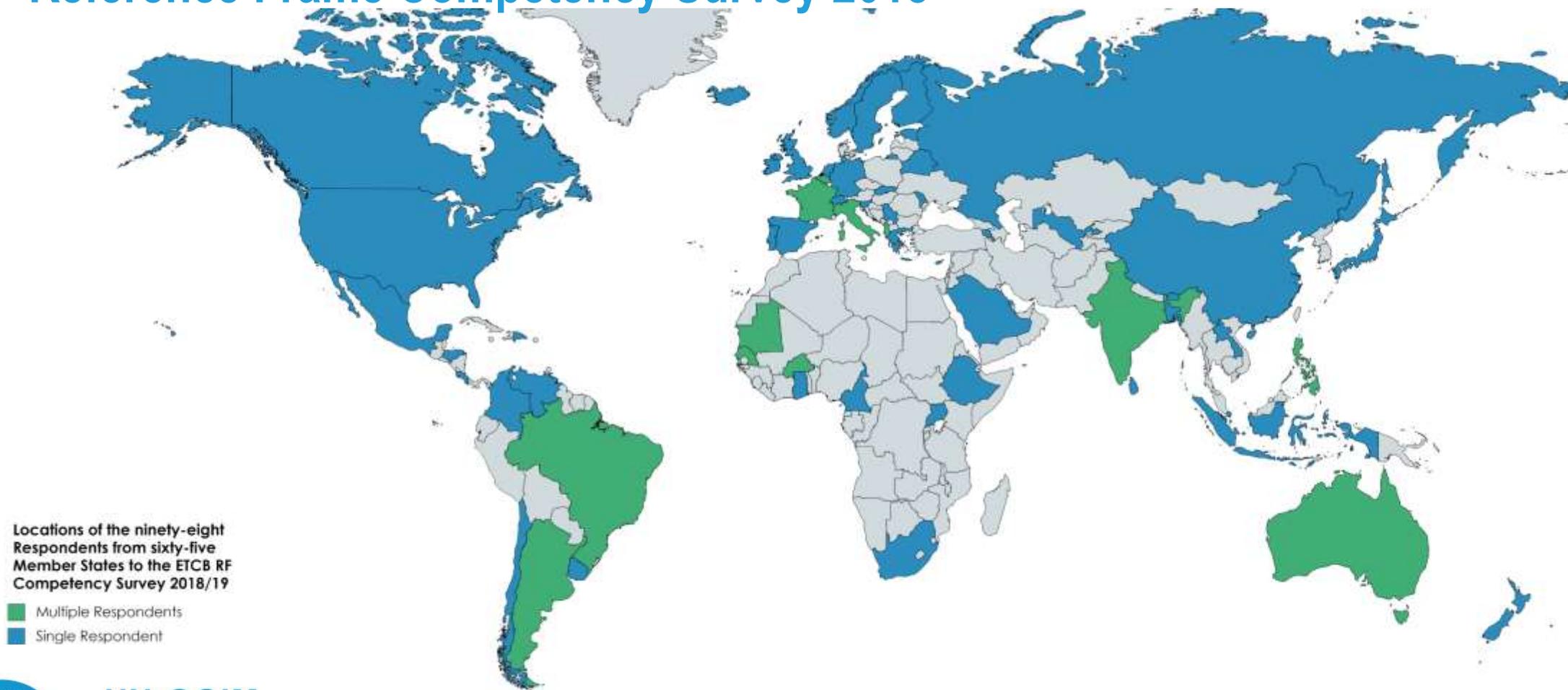
*Reference
Frames*

*GNSS
CORS*

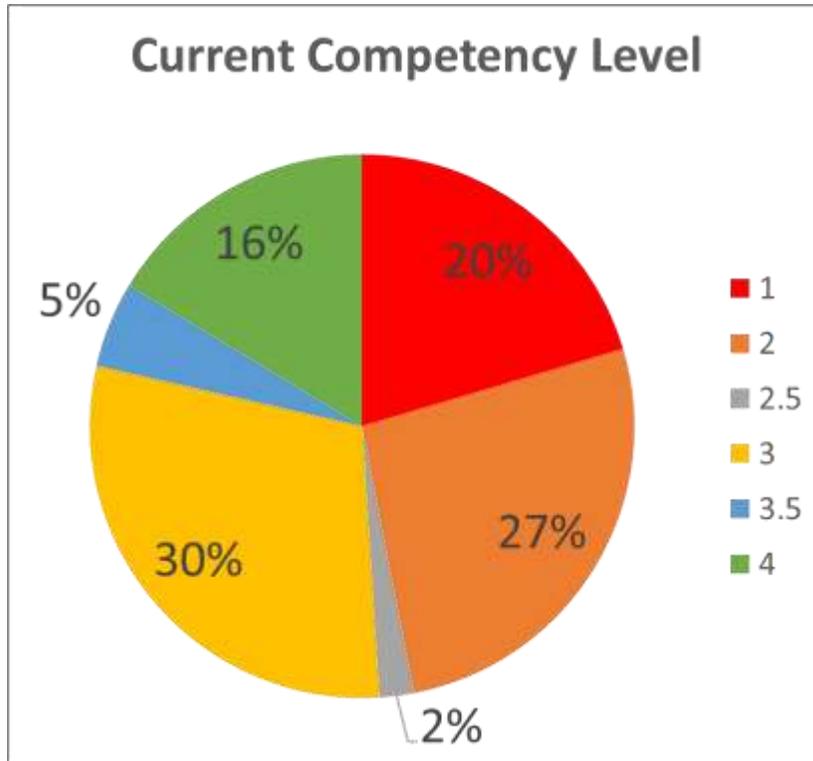
*Geospatial
Information*



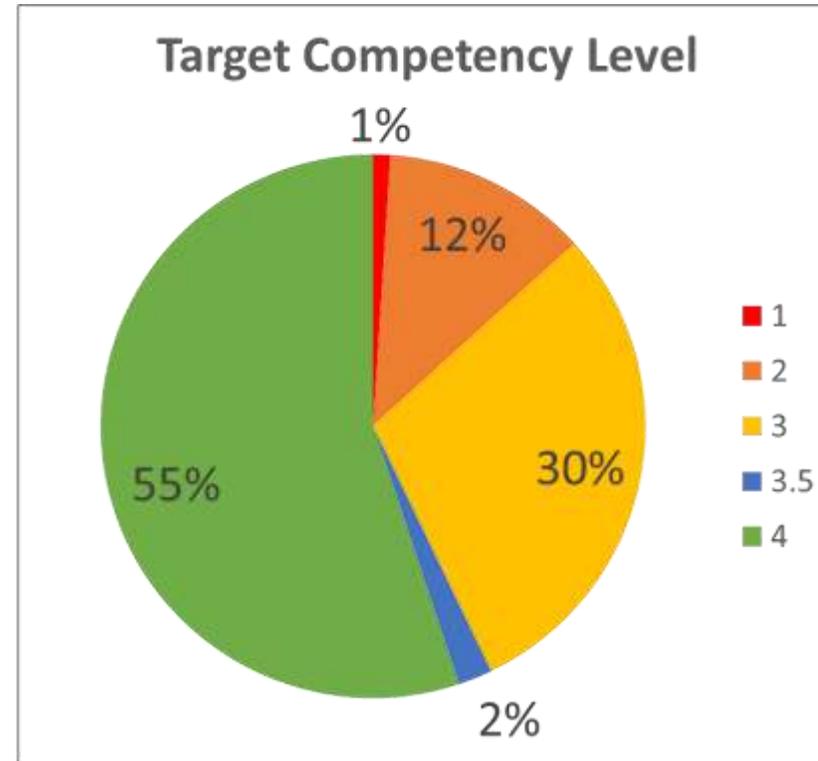
Reference Frame Competency Survey 2018



Reference Frame Competency 2018 – Current & Target Competencies



Mean Current Competency Level = **2.5**



Mean Target Competency Level = **3.4**

GMOs want to “level up”

Reference Frame Competency Survey 2018

- A summary of the results and findings from the 2018 Questionnaire / Survey was published at FIG 2020 WW Amsterdam



- “A Global Survey of Reference Frame Competency in terms of Education, Training and Capacity Building (ETCB): Results, Analysis and Update’
 - Ryan Keenan (Australia), Allison Craddock (USA), Mikael Lilje (Sweden), Robert Sarib (Australia) and Graeme Blick (New Zealand)



https://www.fig.net/resources/proceedings/fig_proceedings/fig2020/papers/ts02g/TS02G_keenan_craddock_et_al_10753.pdf

Reference Frame Competency Survey 2018

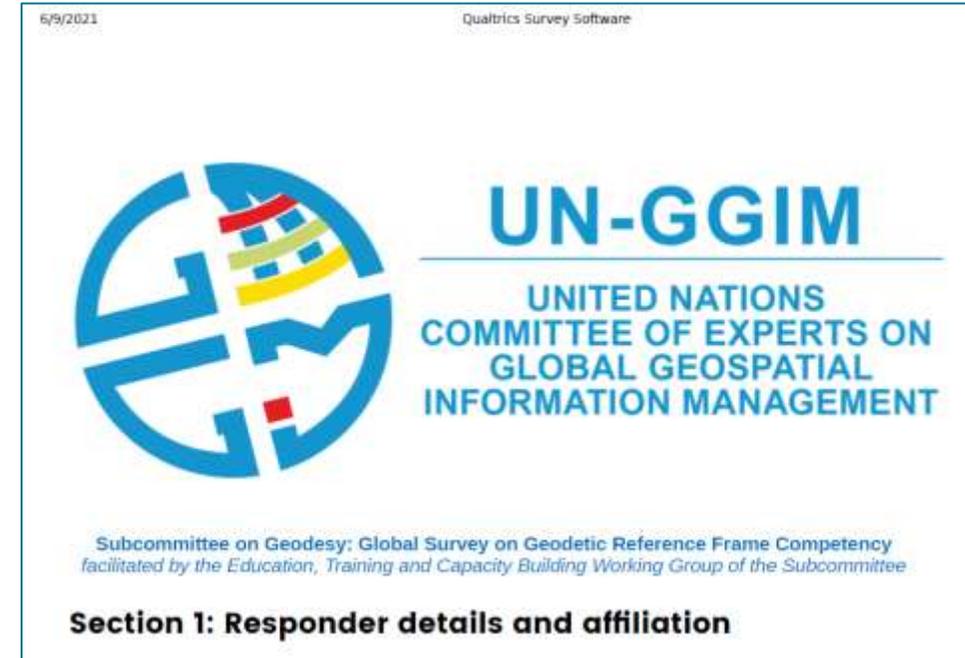
Key Takeaways:

1. Majority aimed to **increase their competencies** by at least 1 level within the next 3 years
2. Very strong need for **continued ETCB contributions** from developed countries
3. Very strong support for a **global facilitator of all ETCB resources** (e.g. proposed GGCE)
4. **More insights needed** into the current (and target) competencies across the UN-GGIM Regions



Reference Frame Competency Survey 2021

- ETCB WG created an updated Survey
 - To better understand *regional* ‘**Geodetic Capacity Development**’ needs
 - What competencies are already possessed?
What will needed for the future?
- Invite sent to all UN-GGIM Regions in June 2021
 - Motivation for 2021 Survey and Who-How-Why they should respond
 - Deadline end of 2021 (extended to Feb 2022)



Reference Frame Competency Survey 2021

- All responses received and being collated
- Findings and Results will be shared with SCOG in support of their Strategy for ensuring the sustainability of the GGRF
- Final Report expected in 2023 Q2
(Presentation at FIG WW 2023 Orlando)

RFC SURVEY	2018	2021
No. of Questions	28	66
No. of Responses	98	207
No. of Member States	65	101

Ultimately ‘making Geodetic Capacity Development’ **FAIR**
(findable, accessible, interoperable and reusable)