



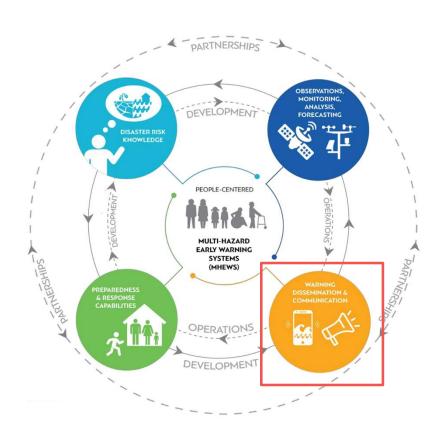
Information and Communication Technologies (ICT) for Early warning systems

WSIS & SDG TalkX: ICTs and Disaster Risk Reduction, 13 Oct 2022

Vanessa Gray Head , Environment and Emergency Telecommunications Division International Telecommunication Union (ITU)



UN Initiative on Early Warning Systems for All



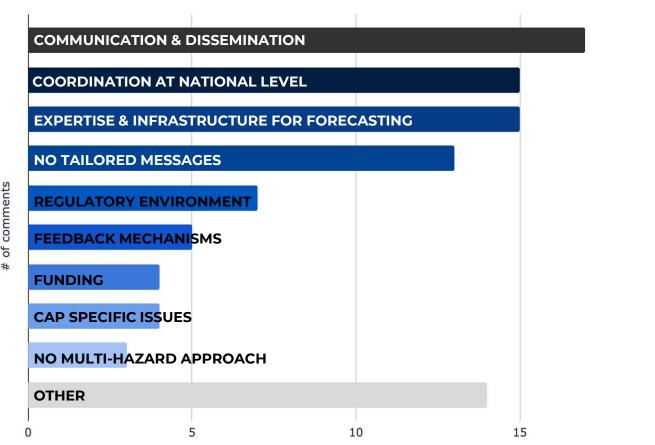
In March 2022, the UN set a new target to ensure that everyone on Earth should be protected by early warning systems by 2027.

Multi-Hazard Early Warning System(MHEWS) Value Cycle – 4 pillars



Communication & Dissemination Pillar in MHEWS

A Research conducted in 13 countries in Africa& Caribbean shows that the biggest challenge for EWS is communication & dissemination pillar.



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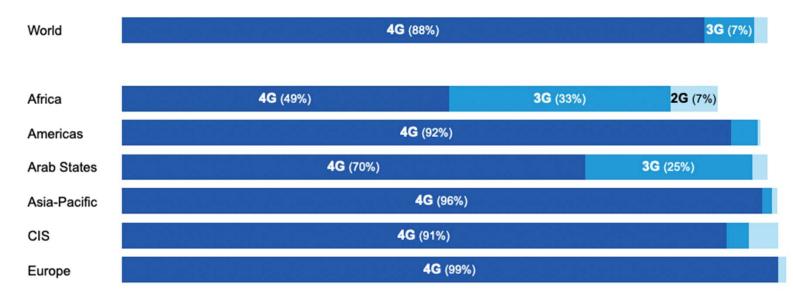
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95% of the world population is covered by mobile network

...a great opportunity to use mobile networks for early warning systems!

Population coverage by type of mobile network, 2021



Source: ITU, Facts and Figures 2021

How & why alerting via mobile-cellular networks works:



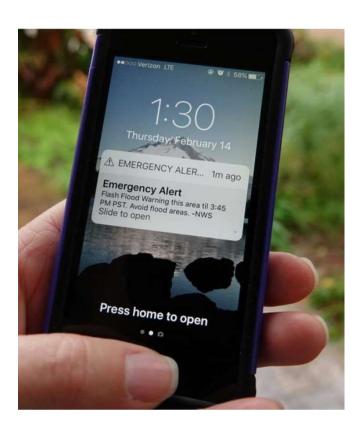


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Cell-Broadcast (CB) & Location-based SMS (LB-SMS)

Both technologies have wide reach:

- Send geo-located messages to users within risk areas, including roamers
- Supports multi-language alerts
- Opt-in challenges limited
- Compatible on most (CB)/all devices (LB-SMS)

Differences:

- No risk of congestion (CB)
- No subscription needed (CB)
- A "blind technology" that does not allow 2-way communication (CB)
- 2-way communication to provide information such as number of users in risk areas (LB-SMS)

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ITU CONTIRUBTION TO EWS FOR ALL INITIATIVE

Digital transformation & early warning systems for saving lives

- Use growth in digital services and networks to deliver alerts to people at risk
- Focus on mobile networks and services
- Promote regulatory approach adopted by EU
- Discuss technologies and standards for implementation (including CAP)
- Identify experts and share best practices
- Bring on board partners and identify financing opportunities



Photo credit: **USAID**



Thank you!