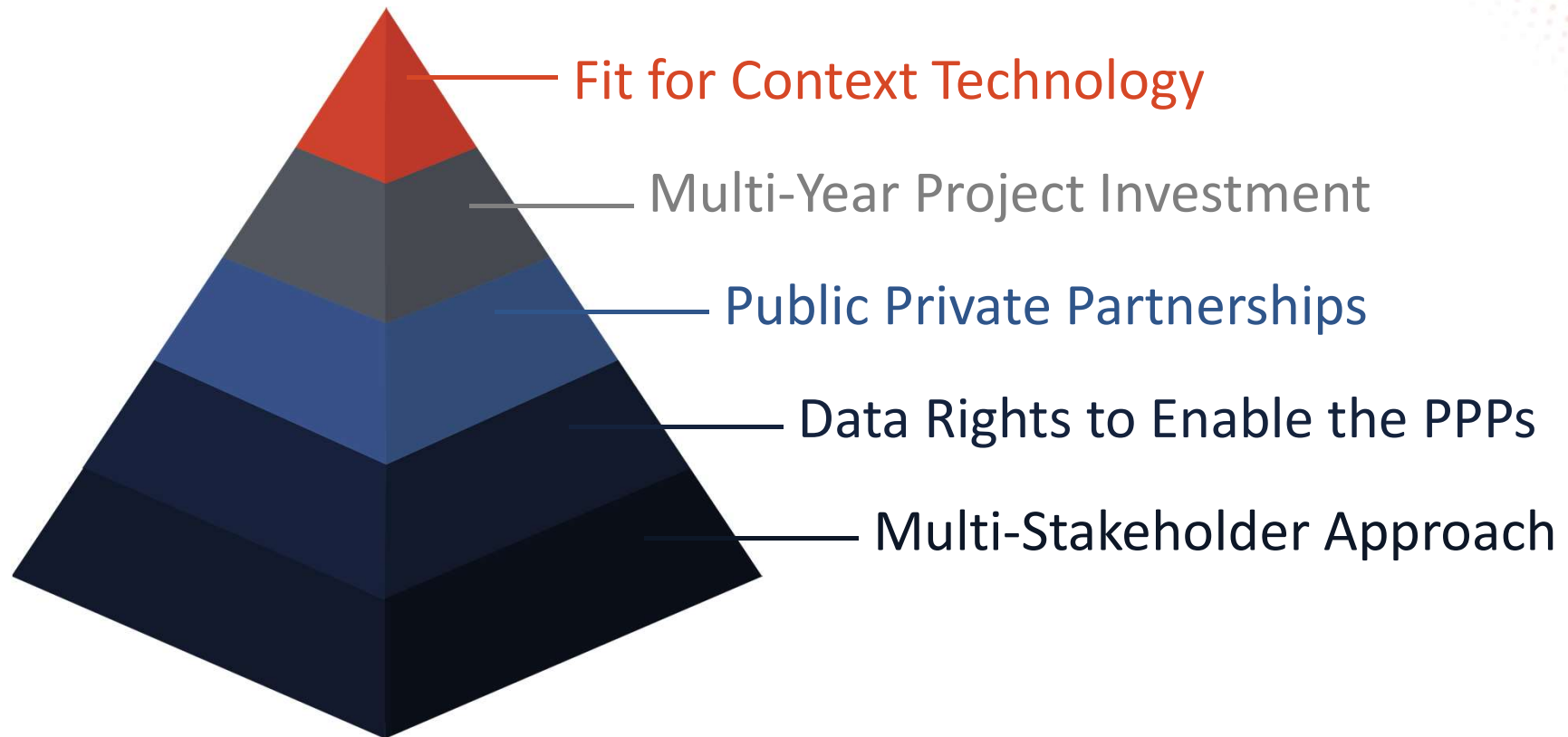


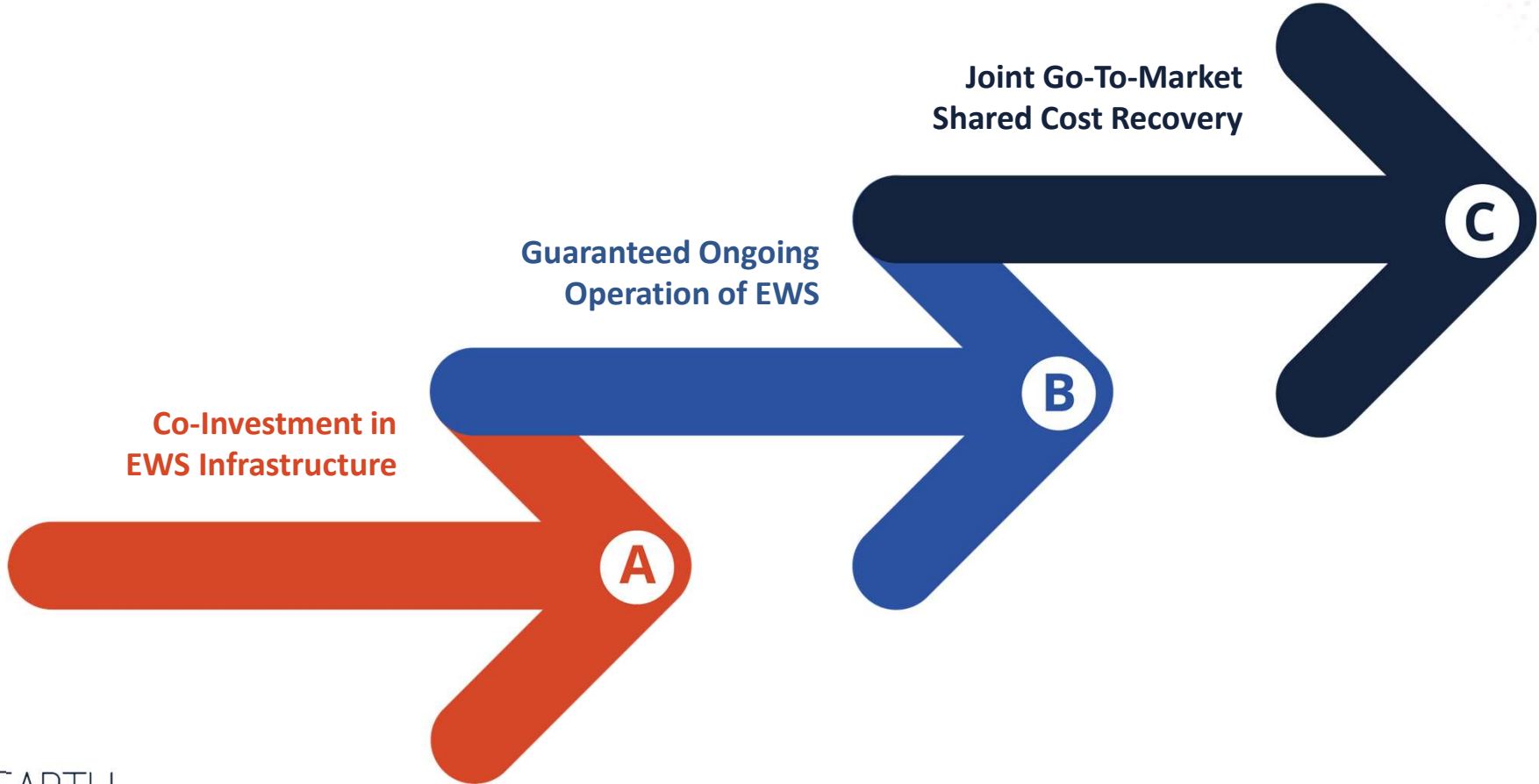
PUBLIC PRIVATE ENGAGEMENT FOR CAPACITY DEVELOPMENT

JIM ANDERSON, SVP – GLOBAL SALES

CONDITIONS FOR SUSTAINABLE PROGRAM DEVELOPMENT



PUBLIC PRIVATE PARTNERSHIP TO ENHANCE NMHS INFRASTRUCTURE, CAPACITY AND SUSTAINABILITY



BRAZIL



- Lightning detection sustainably operated and maintained since 2010
- Over 60 sensors in place
- Original deployment funded by utility companies through research partnerships with INPE.
- Data processing provided by EN. Network maintenance being transitioned to EN
- Ongoing funding provided by a variety of commercial interests – oil and gas, emergency management, others
- Revenue shared with INPE

THE PHILIPPINES: PAGASA

- 28 station network of lightning sensors and AWS
- Ten-year licenses for live data/software services
 - Total lightning with DTA's and proxy radar
 - Real-time current conditions
 - ENcast forecasts for sensor sites and select points
 - Sferic Maps display, API, network management
- Ten years of operations and maintenance under SLA
- PPP MOU for cost recovery and revenue growth
 - Initial commercial sales complete
 - Pipeline of opportunities to sustain network and provide cost recovery



SRI LANKA



- Partnership between Earth Networks and Dialog, the leading mobile network operator
- Ten station network of total lightning sensors and mesoscale automatic weather stations
- Additional product delivery of severe weather warnings, weather forecasts, and rainfall estimation
- Data being integrated into Dialog's Ideamart API services that power SMS/IVR/USSD services
- Data to be used in Dialog's WeatherGuru information and alerting app for smartphones
- Government agencies to benefit include disaster management ministry and the military
- Commercial industries include aviation, shipping, agriculture, fisheries and tourism

MYANMAR



- Pilot project scoping the adoption of software services and transfer of technical expertise to DMH
- Operating a pilot lightning detection network and mesoscale automatic weather stations with DMH
- Products tested include severe weather warnings in CAP, rainfall estimates, and hourly weather forecasts
- Evaluate and begin development of PPE sustainability model through training of DMH and joint sales and marketing. **TAM = \$950K per year**
- Engagement with disaster management, department of civil aviation, military and commercial interests
- Commercial industries include aviation, mobile telecom, parks and recreation, oil and gas, and tourism



OTHER EXAMPLES



Mozambique

- MOU in place
- Despite extreme challenges network is up and running and commercial sustainability is being developed



Ukraine

- 12 sensor network deployed and fully operational for 3 years providing data to HydroMetCenter and Ukrastse
- Cost sharing agreement in place.
- TAM = \$450K per year. Proposals for Ukraine Intl Airlines, City of Kiev and Odessa Cities, Lifecell and energy companies

REGIONAL INTEGRATED EARLY WARNING SYSTEM

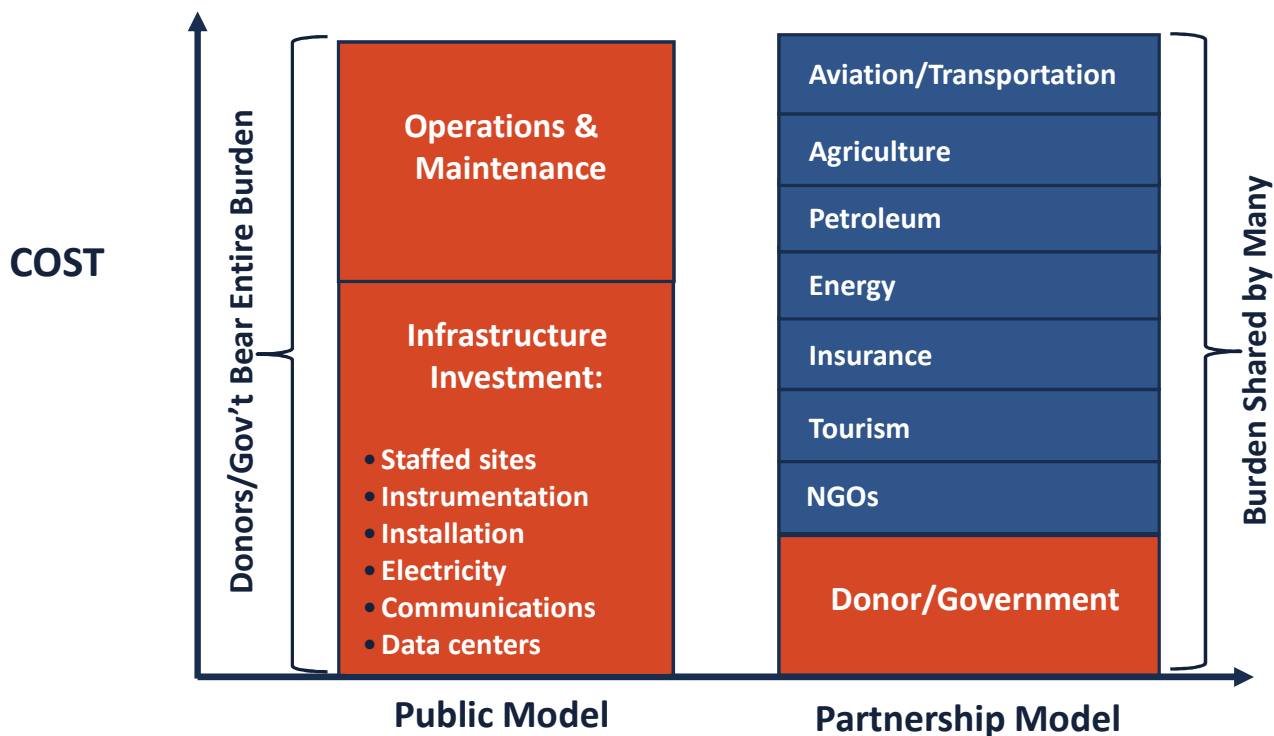


OSDMA

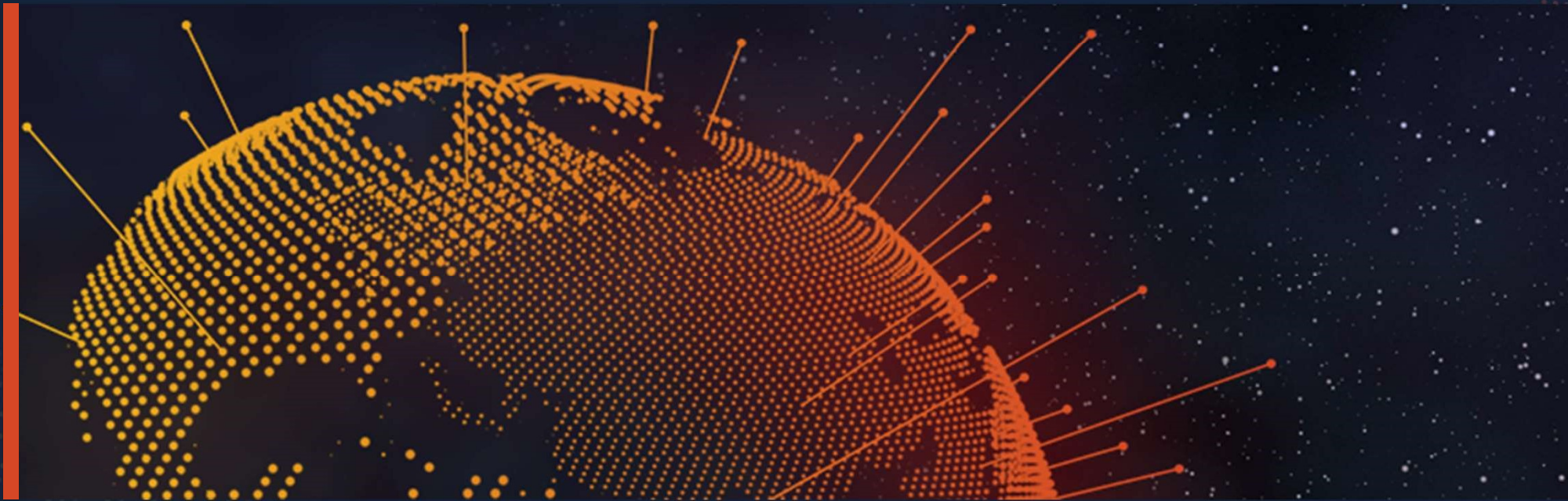
- Partnership with RIMES, the inter-governmental MHEWS organization for Asia and Africa
- Objective to enhance RIMES' member state NMHS capacity for early warning of severe weather with development of both skills and technologies
- EN provides data for severe weather warnings, hourly weather forecasts, and rainfall estimation
- Information flows to RIMES and NMHS through the Sferic API, Sferic Maps and Sferic Mobile application
- RIMES provides data integration services and skills training for staff of NMHS and DM e.g. Odisha, India

PUBLIC PRIVATE PARTNERSHIP ENABLES SUSTAINABLE DELIVERY OF MET SERVICES

Total Operating Cost of Weather Observing Networks



EARTH
NETWORKS



THANK YOU! – QUESTIONS?