TSG-T

Progress Report

TSG-T Chairman:

Sang-Keun Park

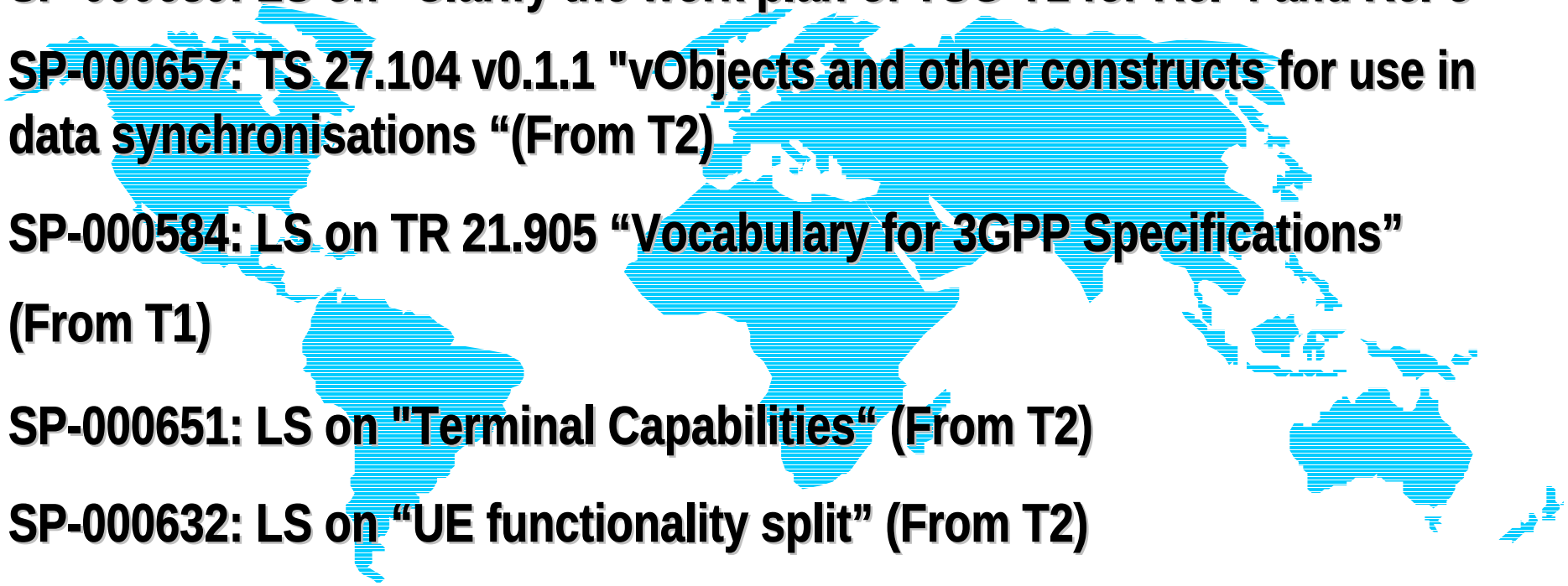
(SAMSUNG Electronics, TTA)

Contents

- TSG-T #10 Overview
- Documents for SA #10
- Progress Report & Issues
  - T1: Conformance Testing
  - T2: Services and Capabilities
  - T3: USIM
- Status of funded MCC Tasks in TSG-T
- Discussions needed in SA #10

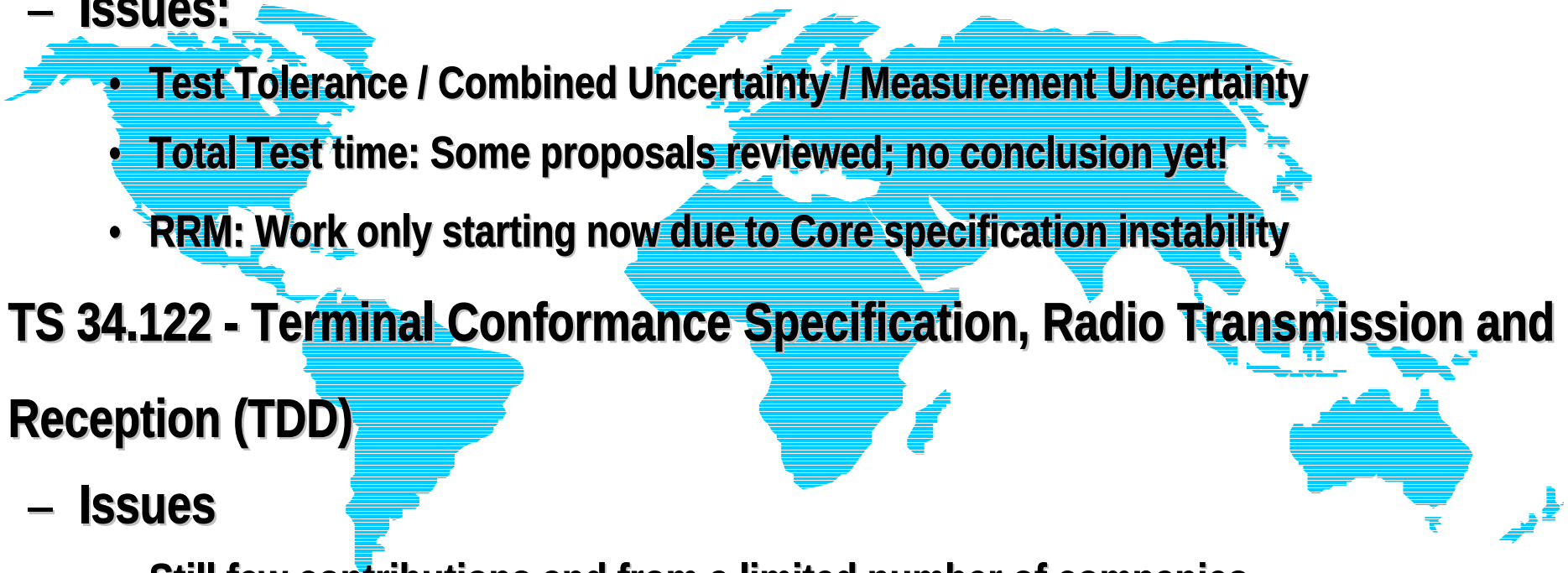
Documents for TSG-SA #10

- ✓ SP-000652: TSG-T#10 Progress Report Slides
- ✓ SP-000639: LS on “Clarify the work plan of TSG-T1 for Rel-4 and Rel-5”
- ✓ SP-000657: TS 27.104 v0.1.1 "vObjects and other constructs for use in data synchronisations “(From T2)
- ✓ SP-000584: LS on TR 21.905 “Vocabulary for 3GPP Specifications” (From T1)
- ✓ SP-000651: LS on "Terminal Capabilities“ (From T2)
- ✓ SP-000632: LS on “UE functionality split” (From T2)



T1 Conformance Testing (1)

- TS 34.121 - Terminal Conformance Specification, Radio Transmission and Reception (FDD)
  - Issues:
    - Test Tolerance / Combined Uncertainty / Measurement Uncertainty
    - Total Test time: Some proposals reviewed; no conclusion yet!
    - RRM: Work only starting now due to Core specification instability
- TS 34.122 - Terminal Conformance Specification, Radio Transmission and Reception (TDD)
  - Issues
    - Still few contributions and from a limited number of companies



T1 Conformance Testing (2)

- **TS 34.123-1 - User Equipment (UE) Conformance Specification, Part 1 – Conformance specification**

Current contents of TSG-T1 release '99 signaling part.
(In 3G FDD environment)

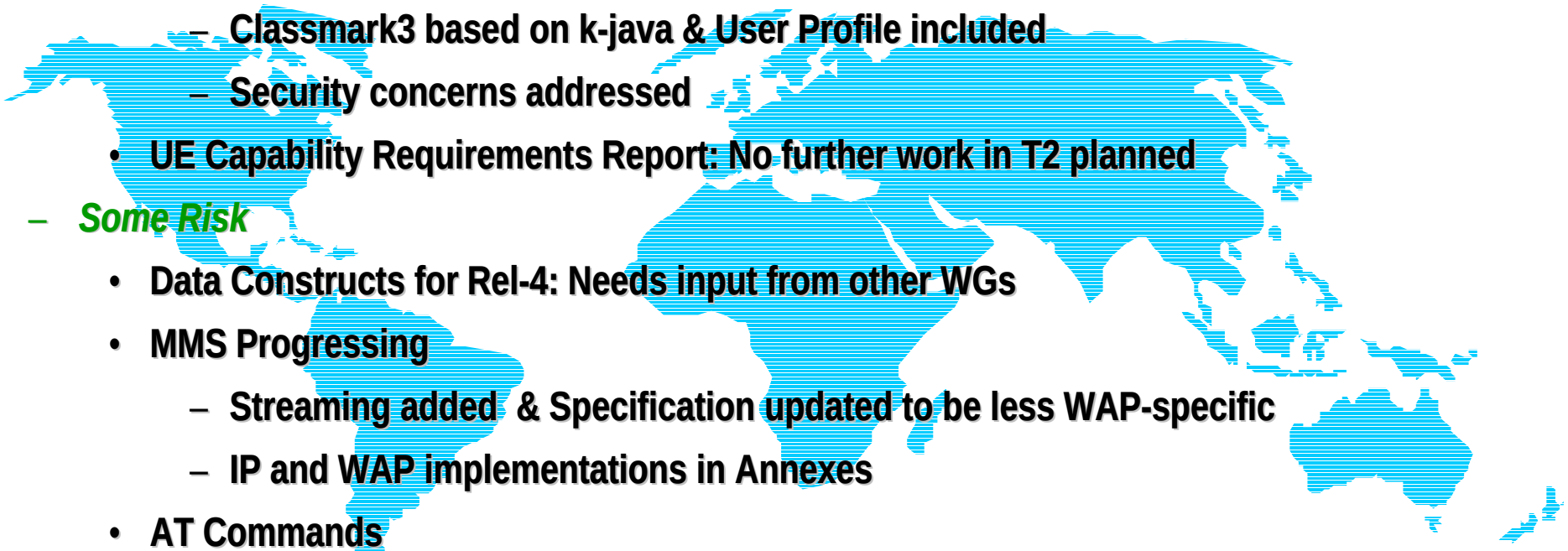
	Sep	Now
Idle mode functions	90%	100%
Voice call functions (incl. emergency call)	98%	98%
Circuit switched data (up to 64 kb/s) + Fax	98%	100%
Auto-calling (restrictions)	100%	100%
SMS (PP & CB)	95%	100%
GSM/3G Handover support (CS)	5%	100%
Packet data	70%	90%

T1 Conformance Testing (3)

- **Two Documents related to EMC**
  - **TS 34.124 & TS 34.926 are finalized & ready to be transferred to RAN4**
  - **EMC SWG is closed**
- **Measurement Uncertainty**
  - **T1/RF will complete regulatory critical test items in TS 34.121 by TSG-T#11**
    - **T1/RF's Draft CRs will be endorsed by RAN4 in January**
    - **To be approved by T1/RF in March**
- **Rel-4 / Rel-5 issues (SP-000639)**
  - **The definition of work program including work tasks for release 4 is going on**
  - **Work tasks for Rel-4 will be linked to tasks in the core groups.**
  - **Work Program will be presented as part of the general work plan by MCC**

T2 Services & Capability (1)

- **Rel-4 Status**
  - *Good Progress*
    - MExE Release 4 Content Complete
      - Classmark3 based on k-java & User Profile included
      - Security concerns addressed
    - UE Capability Requirements Report: No further work in T2 planned
  - *Some Risk*
    - Data Constructs for Rel-4: Needs input from other WGs
    - MMS Progressing
      - Streaming added & Specification updated to be less WAP-specific
      - IP and WAP implementations in Annexes
    - AT Commands
      - Some recent work on AT commands related to (U)SIM functions
      - More work needed, in many areas, many groups adding new features which cannot be controlled by AT commands, e.g. “Network Name”. WGs are invited to consider AT commands when adding new features.

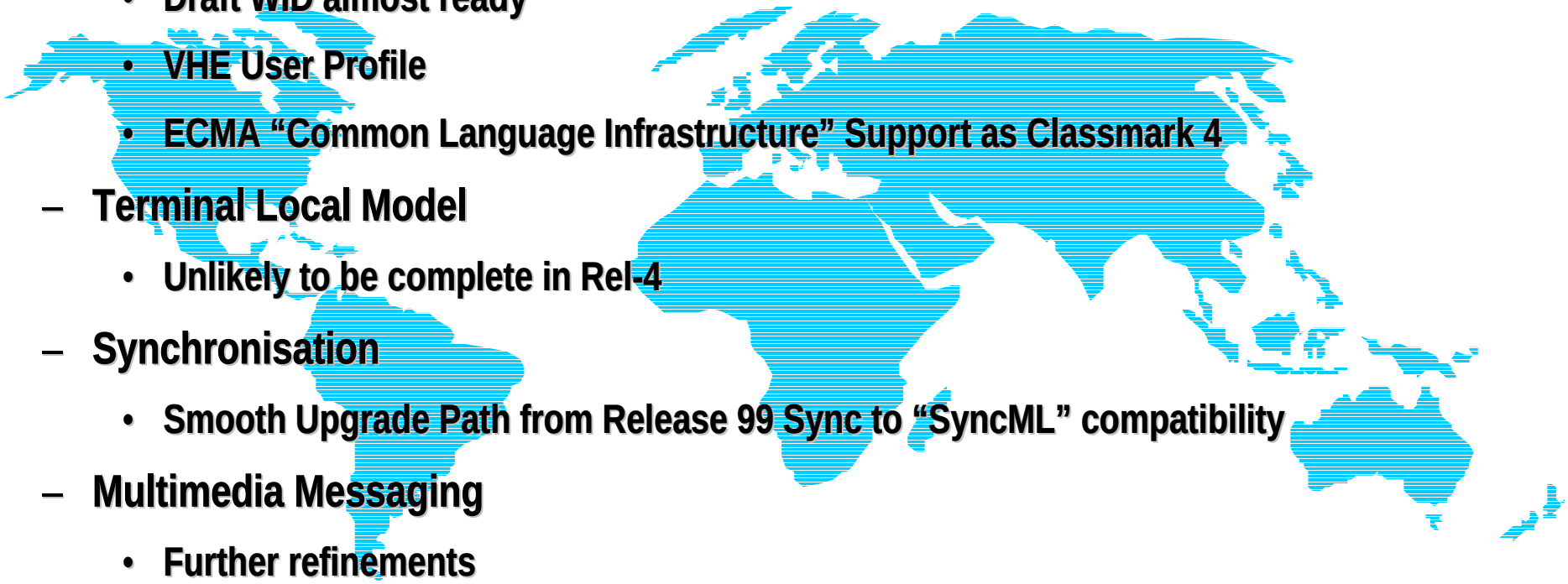


T2 Services & Capability (2)

- **Rel-4 Status - cont.**
  - ***High Risk***
    - **Terminal Local Model: Still needs much more work**
    - **Alternatives to AT Commands**
      - **Discussions at Oxford Workshop and follow-on**
      - **No substantial work in T2**
      - **A possibility for Release 5 but this depends on getting an agreed framework**
    - **Other items**
      - **No input on Bearer Modification without pre-notification**
      - **Limited input from VHE groups on terminal aspects of VHE**
      - **No input on terminal impacts of Location Services**
      - **No input on application aspects of ensuring reliable QoS for PS Domain**

T2 Services & Capability (3)

- **Rel-5 Preview**
  - **MExE Rel-5**
    - **Draft WID almost ready**
    - **VHE User Profile**
    - **ECMA "Common Language Infrastructure" Support as Classmark 4**
  - **Terminal Local Model**
    - **Unlikely to be complete in Rel-4**
  - **Synchronisation**
    - **Smooth Upgrade Path from Release 99 Sync to "SyncML" compatibility**
  - **Multimedia Messaging**
    - **Further refinements**
  - **Terminal aspects of Global Text Telephony**
  - **Terminal impact for VHE/OSA Enhancements**



T2 Services & Capability (4)

- **Specification for Information/Discussion (SP-000657)**

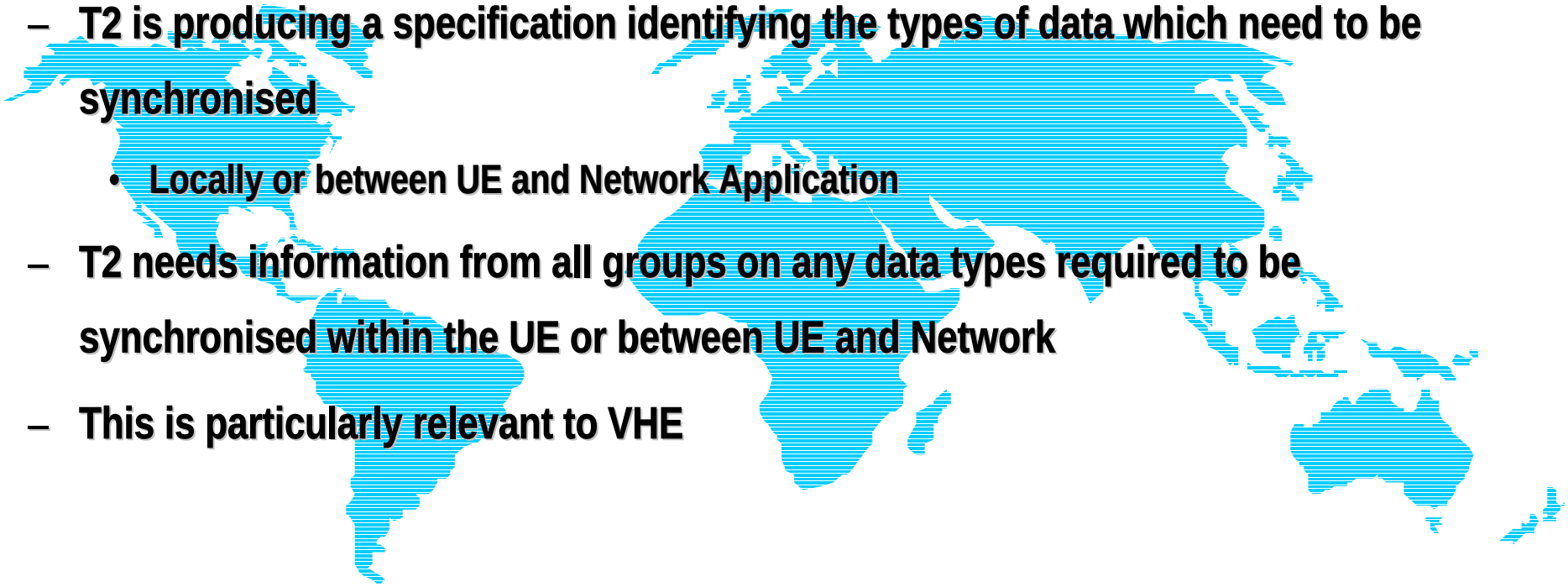
  TS 27.104: "vObjects and other Constructs for use in Data Synchronisation"

  – **T2 is producing a specification identifying the types of data which need to be synchronised**

    - **Locally or between UE and Network Application**

  – **T2 needs information from all groups on any data types required to be synchronised within the UE or between UE and Network**

  – **This is particularly relevant to VHE**



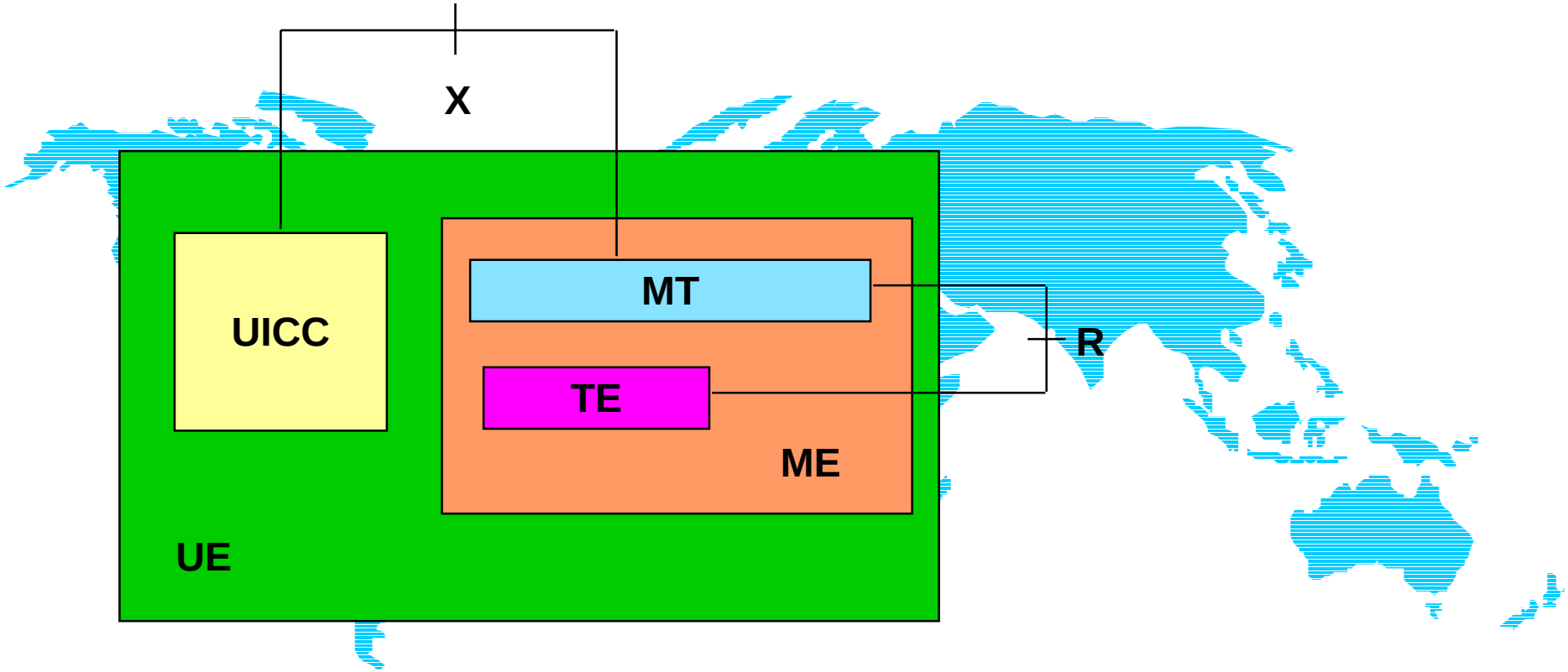
T2 Services & Capability (5)

- **Terminal Capabilities (SP-000651)**
  - Operators concerned that information about Terminal Capabilities is not available in the application layer of the network
  - Discussion document prepared to raise awareness and seek solution
  - Need for a workshop across WGs?
- **Issues on External Interfaces**
  - Need for
    - Common high level protocols interfacing to specific low level interface
    - Overall system security thinking in development of External Interfaces outside 3GPP
  - Model for UE architecture
    - Multiple serial-link model or a completely IP-based model?

T2 Services & Capability (6)

- **Security Issues with External Connections (SP-000632)**
  - **Example of "Car Pooling in the Wireless Lane" considered**
  - **Major problems with "transferring" identity from handheld phone to car-phone**
    - **Carry second smartcard from same operator and insert in car (car environment issues)**
    - **Transfer secret information from handheld card into in-car card (severe security implications)**
    - **Enable USIM interface over local wireless link (security implications as whatever encryption is put over this link, it will be broken eventually)**

Reminder of Current UE Architecture



T3 USIM (1)

- **Release 99 test specifications were approved (MCC Task 162)**
  - **TS 31.120 (TP-000204)**

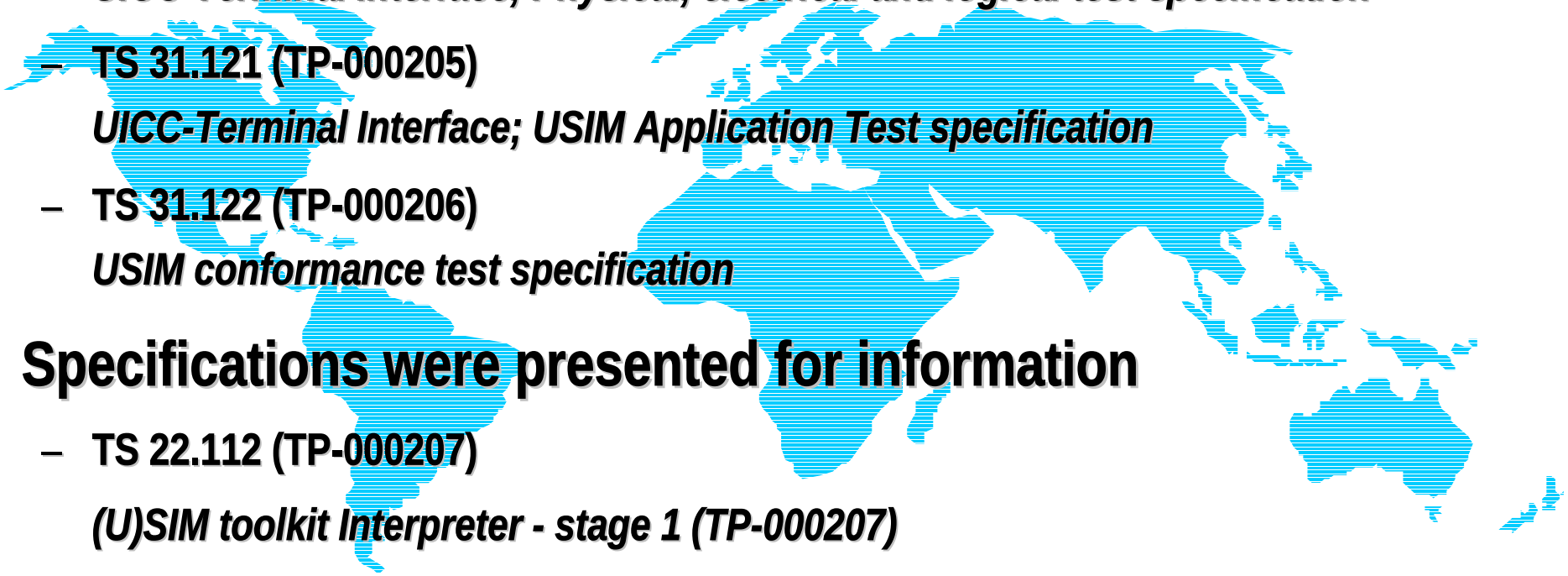
    UICC-Terminal Interface; Physical, electrical and logical test specification
  - **TS 31.121 (TP-000205)**

    UICC-Terminal Interface; USIM Application Test specification
  - **TS 31.122 (TP-000206)**

    USIM conformance test specification
- **Specifications were presented for information**
  - **TS 22.112 (TP-000207)**

    (U)SIM toolkit Interpreter - stage 1 (TP-000207)
  - **3GPP 11.13 (TP-000208)**

    Test specification for the SIM API



T3 USIM (2)

- **Rel-4**
  - Work item "USAT local link"
    - To allow the use of other bearers such as RS232, Bluetooth, …
    - Expected to be finalised at TSG-T #11 (subject to resolution of security issues)
  - Work item "CPHS features"
    - Standardises the previously proprietary CPHS features
    - Expected to be finalised at TSG-T #11
  - First draft of the Technical Report on SIM/USIM inter-working has been reviewed
    - Expected to be presented to TSG-T #11 as v1.0.0
  - No progress on UICC database work item – most likely to be moved to Rel-5
  - Progress on UICC/terminal interface speed enhancement
    - Feasibility study expected at next meeting
  - TSG-SA advice sought about USIM support for Rel-4 GSM only terminal

T3 USIM (3)

- **ETSI Project Smart Card Platform (EP SCP)**

  Progress Report for information

  - **ETSI TS 102 221 Terminal - UICC interface**
    - **This document is the core specification for TS 31.101**
    - **Several corrections to Release 99 (new version: 3.1.0)**
    - **Change to power consumption values for 1,8V and 3V to 10mA (Rel-4)**
  - **ETSI TS 102 222 Administrative Commands**
    - **Alignment with ETSI TS 102 221 Release 99**
  - **Technology Independent Card Application Toolkit specification**
    - **Based on TS 31.111 USAT**
    - **First Draft was presented at last SCP meeting for information and discussion**
  - **Next meeting: Berlin, 17-19 January 2000 (preceded by T3 #17)**

Status of funded MCC tasks in TSG-T

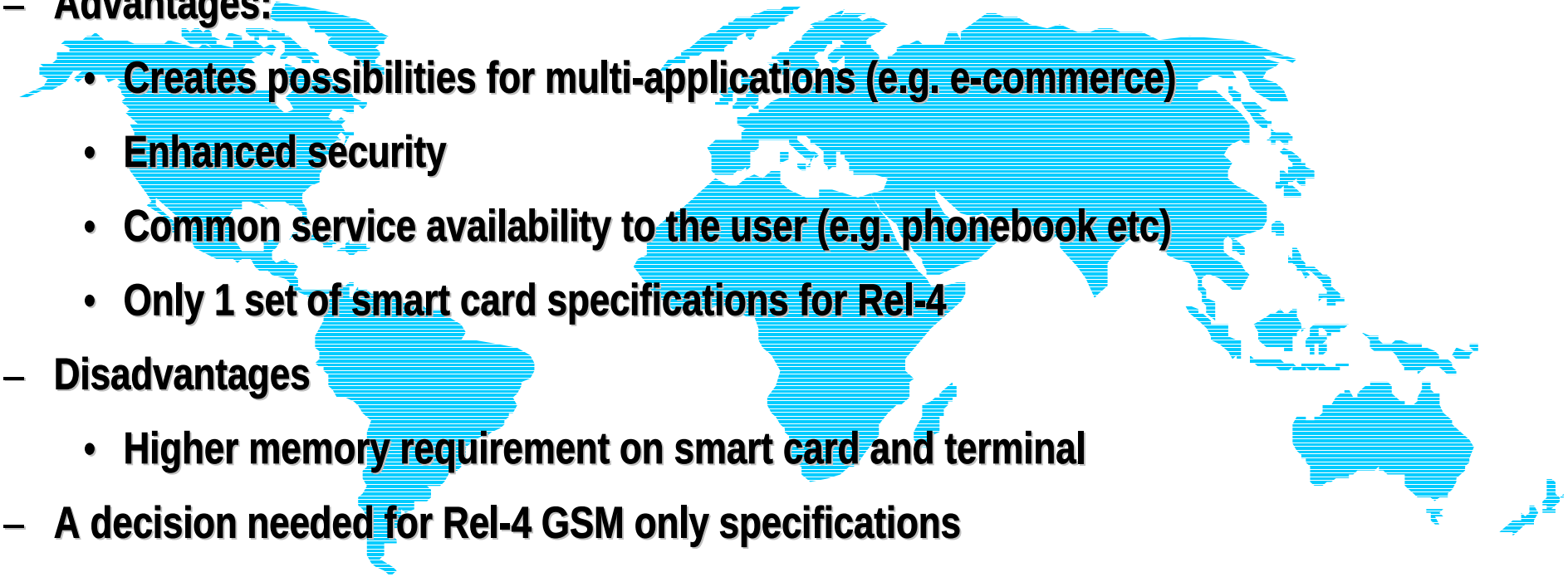
- ✓ **MCC Task 162**
  - Three test specifications on USIM and UICC/USIM interface
    - All three approved at TSG-T #10
  - Task 162 completed on schedule and the project is now closed
- ✓ **MCC Task 160**
  - Drafted 110 Test Cases, 500 Test Cases will be completed by June 2001
  - T1 recommends advance of 2002 funding (18 MM) to 2001 to supplement insufficient voluntary contribution and this was endorsed by TSG-T#10
- ✓ **MCC Task 161**
  - The four experts have been working on the development of
    - L2 PDCP & BMC, L2 MAC, Intersystem HO (CS)
    - Review and refine RRC test (was resolved by voluntary means)
  - Task 161 completed and the project is closed

Discussion needed in TSG-SA #10 (1)

- ✓ **T1 proposed New MCC Task**
  - The on-going updates and changing of the core specifications is leading to an unexpectedly large amount of time being spent maintaining already implemented Test Cases in TTCN
  - MCC estimates 8 MM required for this new task
  - Delivery schedule and funding for Rel-4 and Rel-5 will be provided at TSG-T #11 by MCC
- ✓ **Testing of Applications (LS in SP-000639)**
  - T1 has put together a tentative list of features (MExE, OSA, IP, …)
  - Guidance needed
    - Requirements
    - Responsibility

Discussion needed in TSG-SA #10 (2)

- ✓ **Should GSM only Rel-4 terminals be mandated to support USIM functionality? (i.e. 3GPP TS 31.102 and ETSI TS 102 221)**
  - **Advantages:**
    - **Creates possibilities for multi-applications (e.g. e-commerce)**
    - **Enhanced security**
    - **Common service availability to the user (e.g. phonebook etc)**
    - **Only 1 set of smart card specifications for Rel-4**
  - **Disadvantages**
    - **Higher memory requirement on smart card and terminal**
  - **A decision needed for Rel-4 GSM only specifications**



Reminder about terms SIM, USIM and UICC

- in GSM
  - SIM = physical card / application (GSM 11.11)
- but for UMTS,
  - UICC = physical card (TS 31.101 but refers directly to ETSI TS 102 221)
  - USIM = 3GPP application on UICC (TS 31.102)

Cards based on a UICC can allow for:

- one (or more) USIM applications
  (on a dual mode terminal, the USIM application can provide GSM functionality)
- an “old-fashioned” GSM application for compatibility with R99 (and earlier) GSM only terminals
- other independent applications (e-commerce etc)

Thank You