



Java Card Forum
ETSI plugtest : 12/10/01

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Chairman JCF Business Committee
V.P. Card R&D GEMPLUS

- Be the place for technical exchanges between Java Card actors
- Prepare technical documents (specifications, APIs, application notes and so forth) in support of Java Card
- Collaborate with SUN who formats and distributes specifications, develops test suites and reference implementations
- Establish the versioning of the standard
- **What is outside JCF scope:**
 - *debate on price and customer*
 - *products definition*

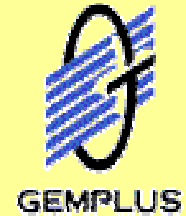
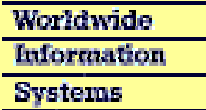


■ **Membership in Java Card Forum is granted to any company that:**

- *endorses Java Card*
- *supplies products which embed (or will embed) Java Card API*
- *is licensed by SUN*
- *applies for membership*
- *agrees to be bound by the by-laws of the Forum, including commitments to actively participate and work for the JCF deliverables*



Founders:



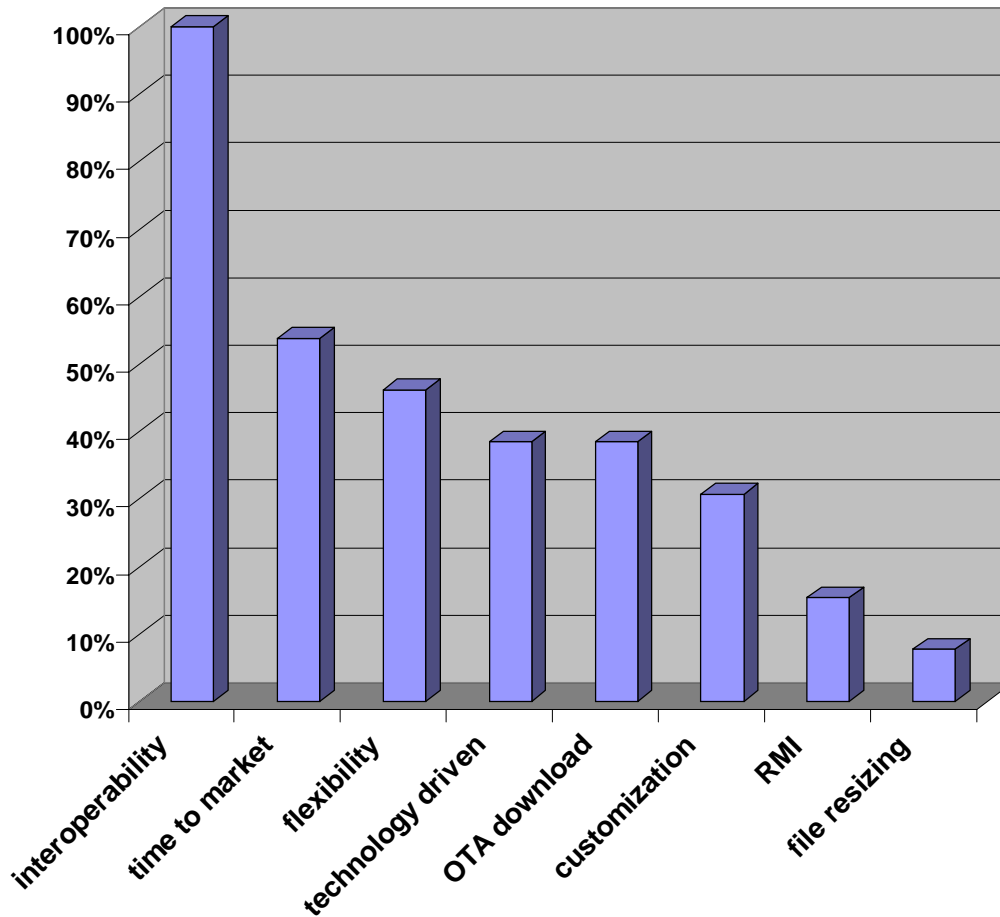
■ STRATEGIC PARTNERS

- *The Java Card Forum also has Strategic Partners, which are companies that are Java Card users in vertical markets.*

■ OBSERVERS

- *Observer status may be granted by the Membership of Java Card Forum to organizations that do not meet all of the criteria for Membership, but have interests in Java Card, and whose participation would be beneficial to the objectives of the Group.*





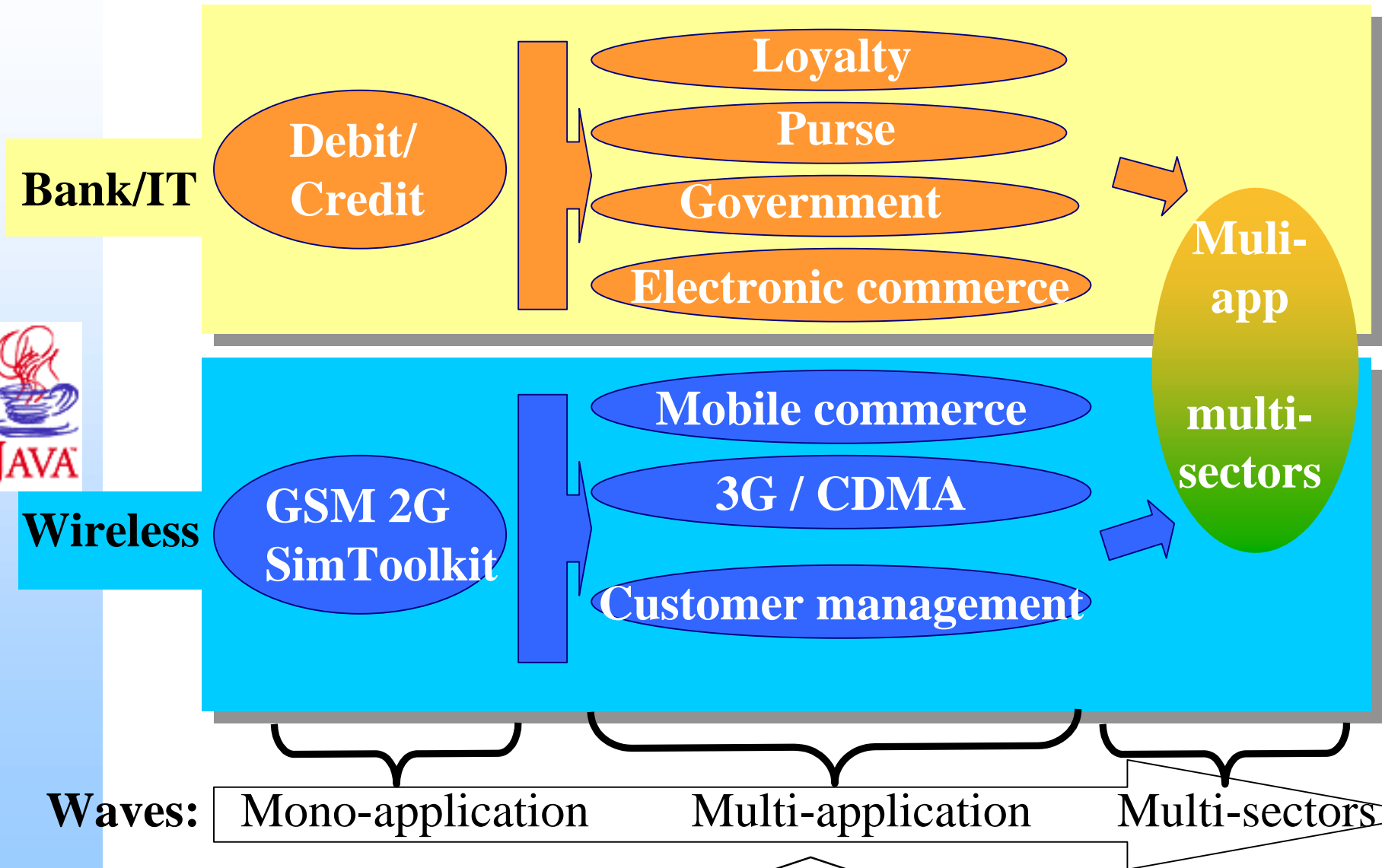
- Market survey / 15 operators implementing JavaCard

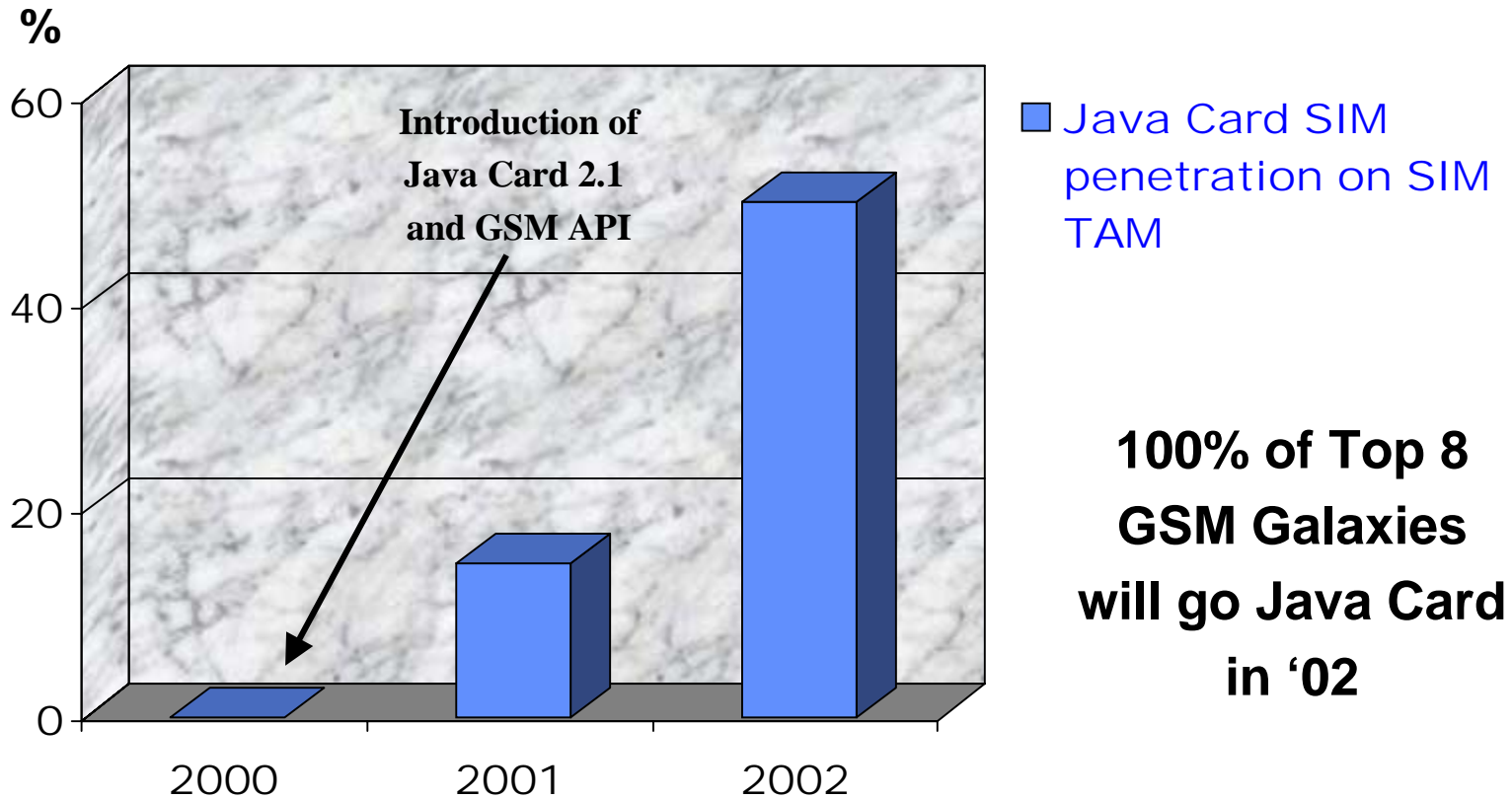
- 100% vote for interoperability:

- *multisourcing*
- *one environment*
- *one development*

- Different levels of benefit awareness among customers





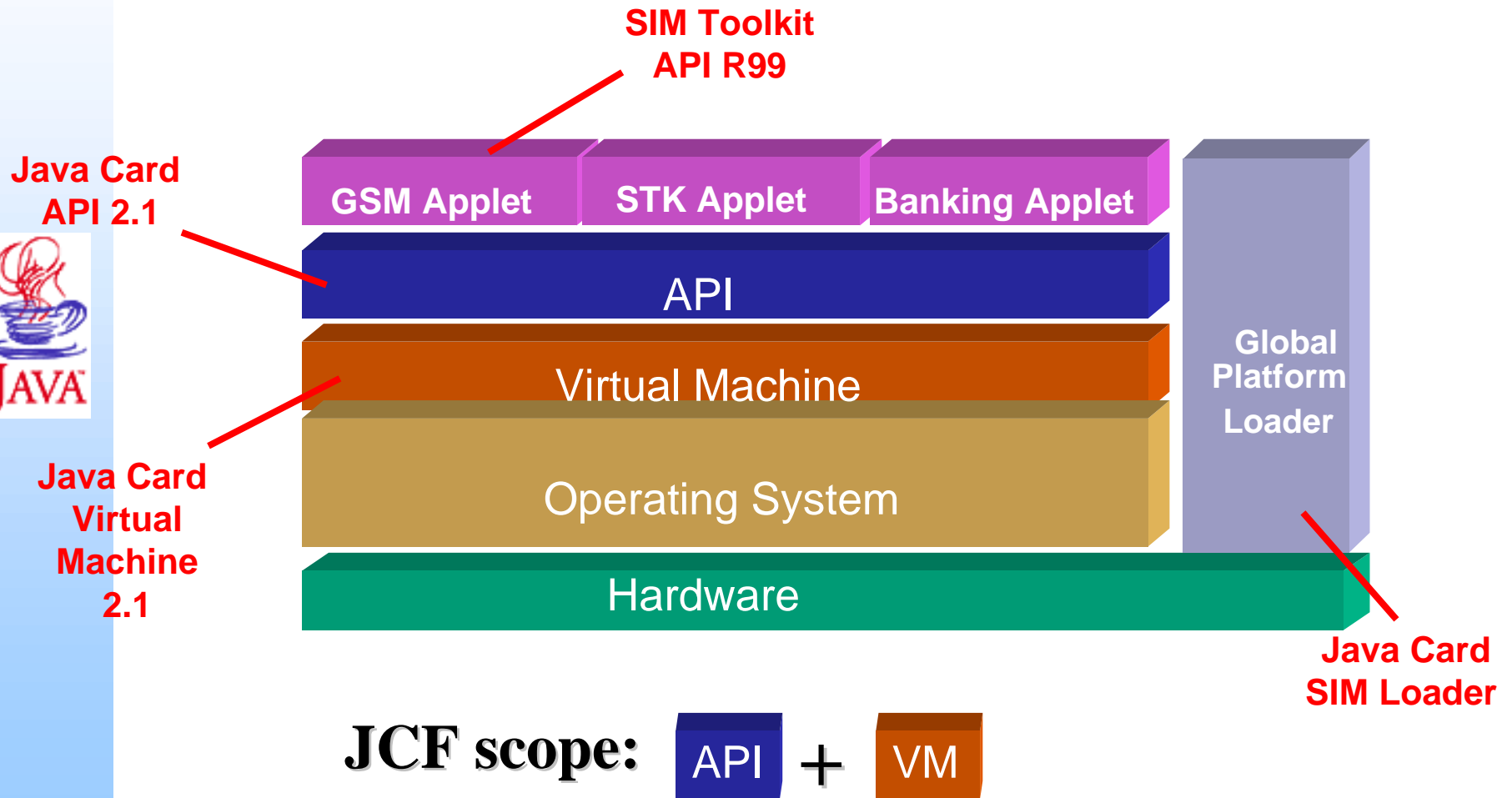


100% of Top 8 GSM Galaxies will go Java Card in '02





The Java Card SIM architecture



What does interoperability mean ?

1) Java Card platform (Source & Byte code)

2) SIM API

3) OTA, OP Loader

4) Applications (applets)



- **Chip resources are different**
 - *eg., RAM, EEPROM free space, stack management*
- **Specifications could be fuzzy or misinterpreted**
- **Non standard features (or not clearly defined)**
 - *Concurrent applications, Garbage Collector, Memory Management*
- **Optional features of the specs**
- **Development tools stability**



■ Performance:

- *native + 20% up to 2 time for high end implementations*
- *overheads acceptable for exiting markets*
- *new chip generation (16/32bit) will boost Java Card performances*

■ Communication represents up to 40% of the transaction duration (GSM) !

- *handsets must evolve with high speed protocol*
- *RMI*

■ Open systems require high secure implementation:

- *modular Protection profiles*
- *Common Criteria*

■ Necessity to strengthen JCF / SCP relationship



- **Java Card is the leading Open System**
- **2.1 (and 2.2) is a mature basis for SIM interoperability**
- **At last 3 years of stability**
- **SUN test suite (CJCK) for JavaCard interoperability**
- **J2ME in handset and SIM JavaCard as VAS enabler**
- **Security will be a key differentiation factor**

...thank you for your attention !

