3GPP TSG S1 “All IP” Workshop

Web-Based Network Management for IP Networks

February 7-9, 2000
Nice, France

Joanna Guenin
Motorola, U.S.A.
(j.guenin@motorola.com)

MOTOROLA

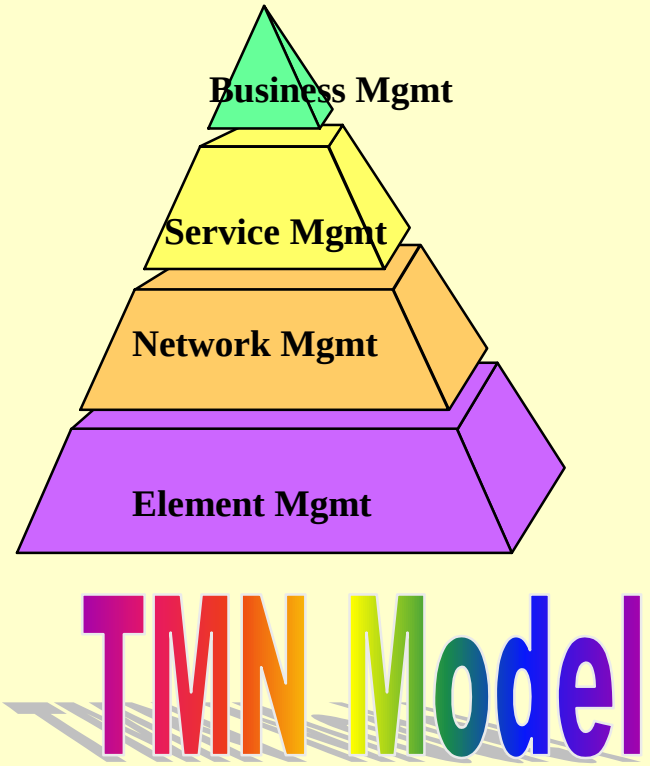
The Management Challenge

- **Integration**
- **Legacy Migration**
- **Availability**
- **Usability**
- **Scalability**
- **Reuse**

MOTOROLA

The Network Management Challenge for IP Networks

- **Fault Management**
  - **Guaranteed Delivery required for Telecom**
- **Configuration Management**
  - **Router/Core support**
  - **Data Synchronization & Integrity**
- **Performance Management**
  - **QoS and SLAs support**
- **Security Management**
  - **Fraud protection**
  - **User Authentication**
- **Accounting Management**
  - **IP Usage Metering**
  - **QoS accounting**
  - **Internet provisioning and billing**



MOTOROLA

Benefits of Web-enabled Network Management

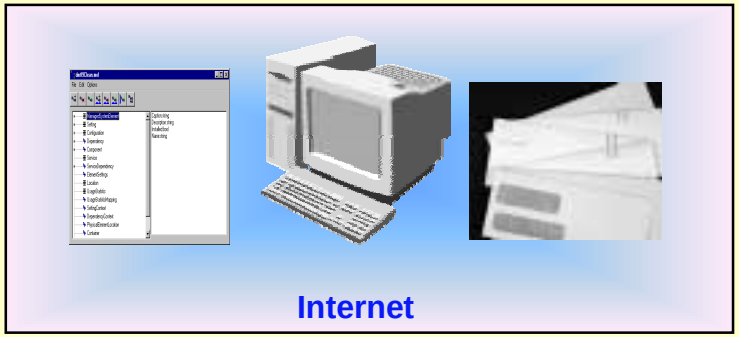
- **Intuitive, graphical, easy to use**
- **Infinite vendor support**
- **Minimal training of staff**
- **Facilitates the opening up of the network for plug-and-play**
- **Eliminates costly software upgrades**
- **New management features can be rapidly developed and installed**
- **Easy integration with operators other business systems**
- **Using Web-based technologies for Enterprise management is where the industry is going**

The web based technologies will be used for IP networks when telecom and datacom converge!

MOTOROLA

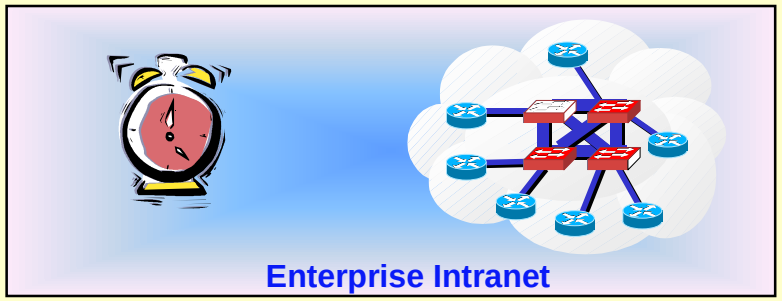
The WEB is Ubiquitous!

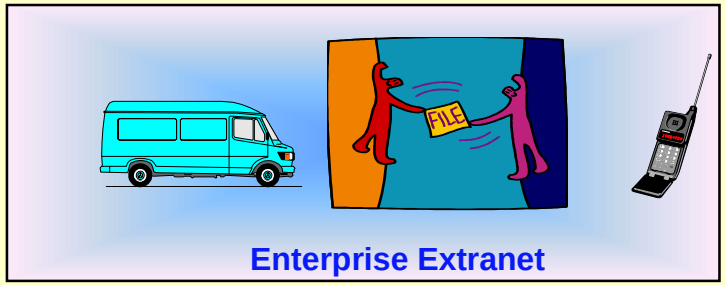
Customer Self-Help
- Brochures
- Training Material
- Billing Queries



Enterprise Management
- Provisioning
- Daily O&M
- Planning/Optimizing

Value Chain Partner Communications
- Orders
- Inventory
- Management Data Exchange
- Business-to-business eCommerce





MOTOROLA

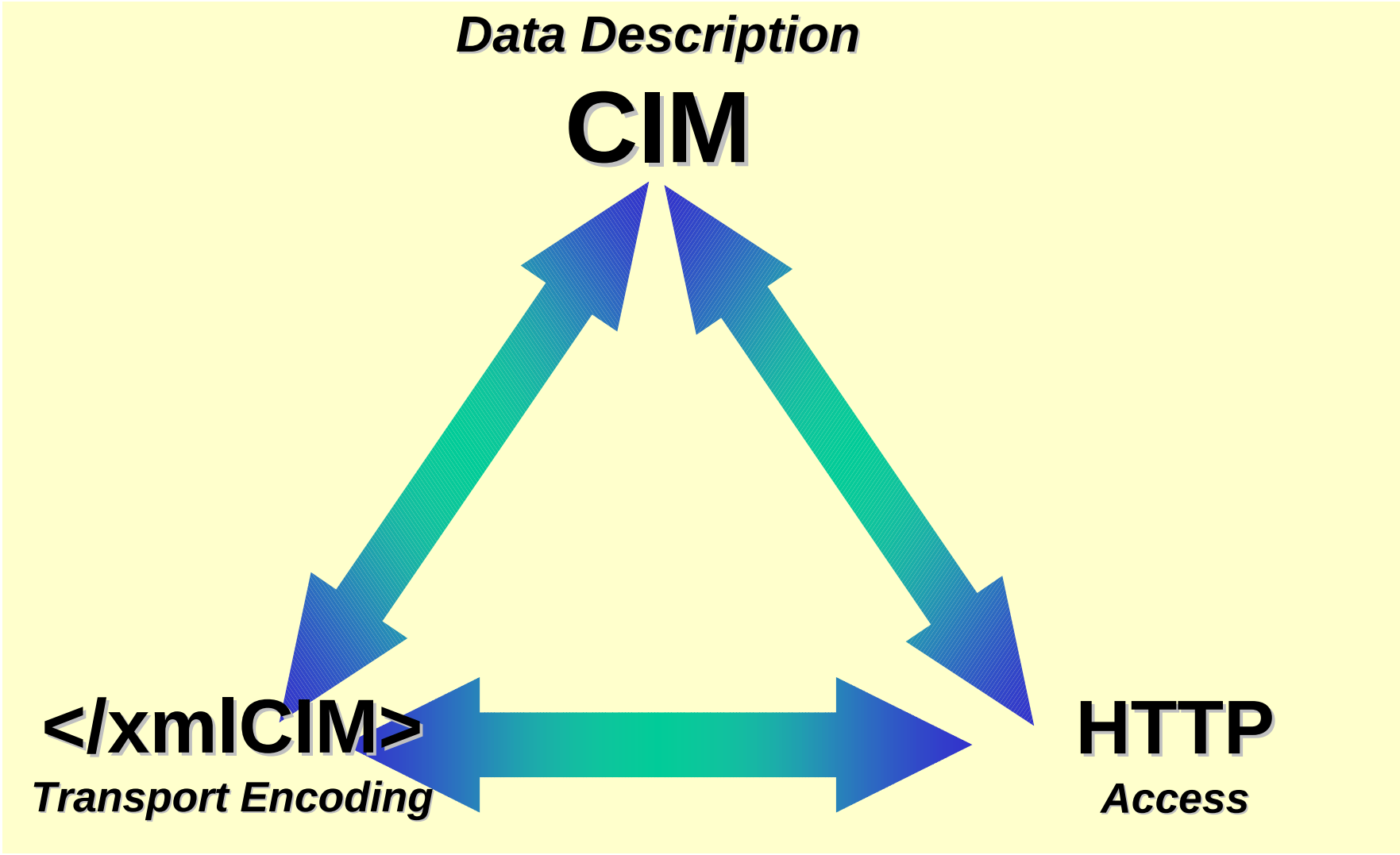
DMTF's WBEM Initiative

DMTF - Distributed Management Task Force

WBEM - Web-based Enterprise Management

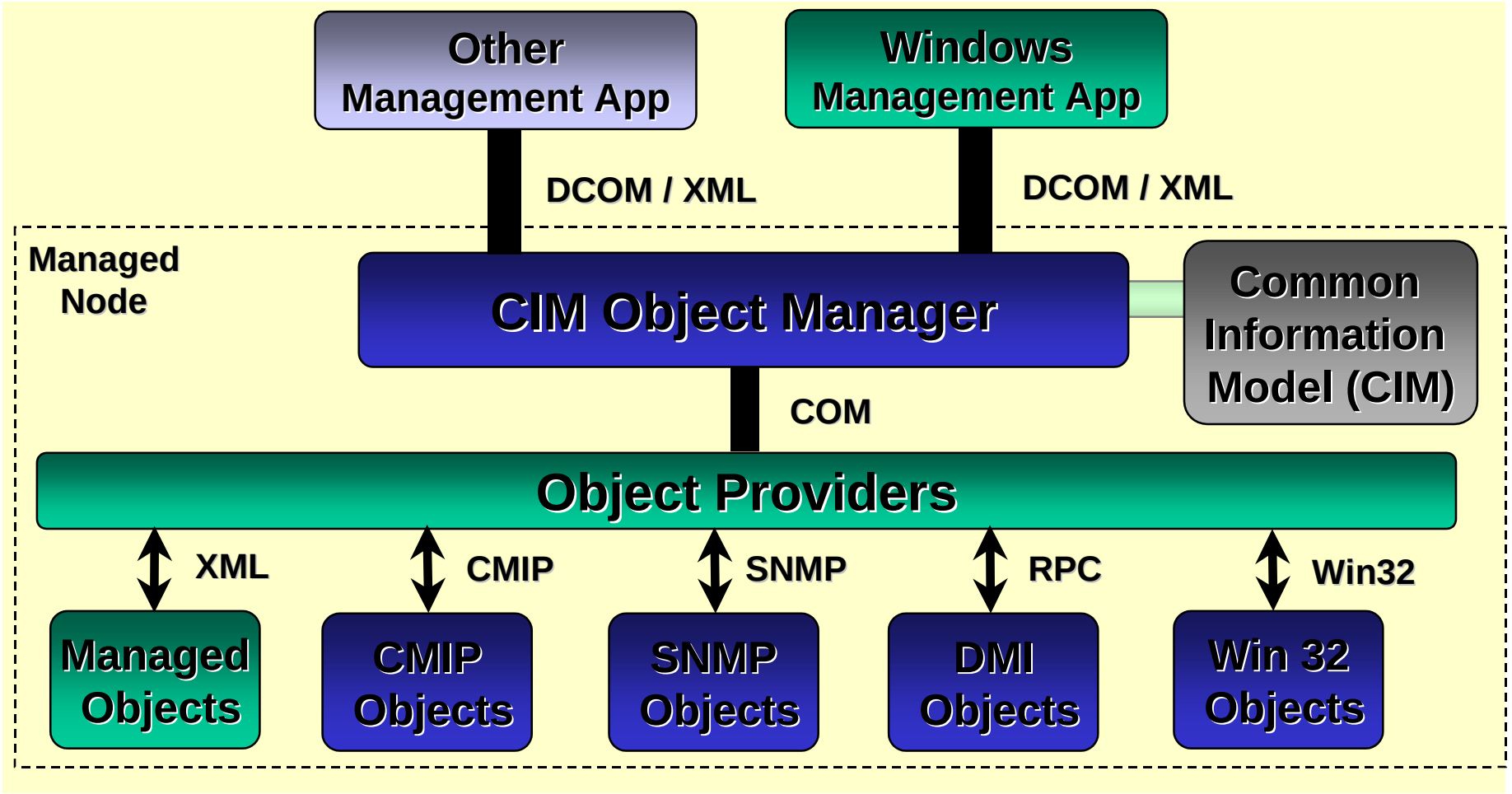
MOTOROLA

The WBEM Triangle

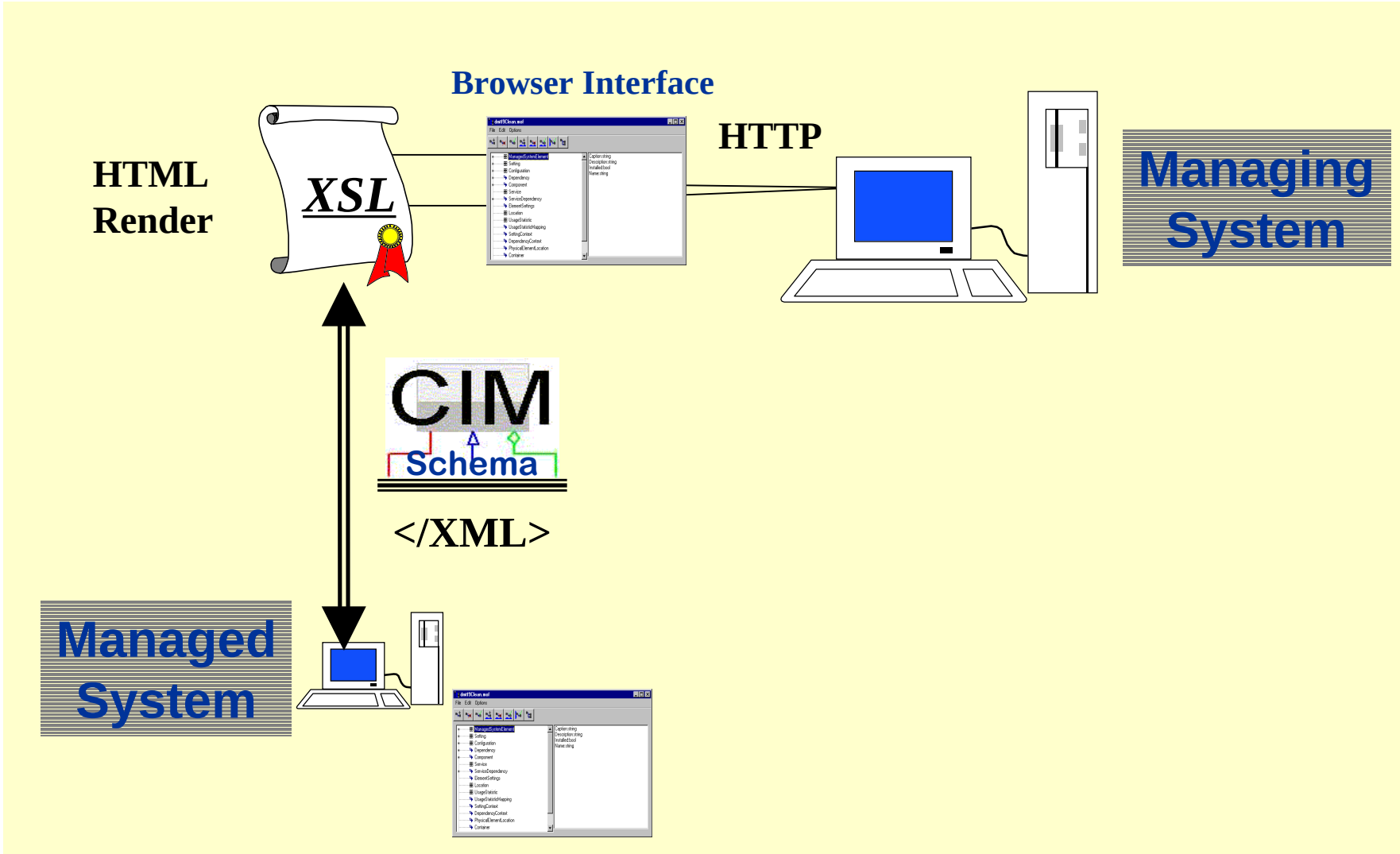


MOTOROLA

WBEM Architecture

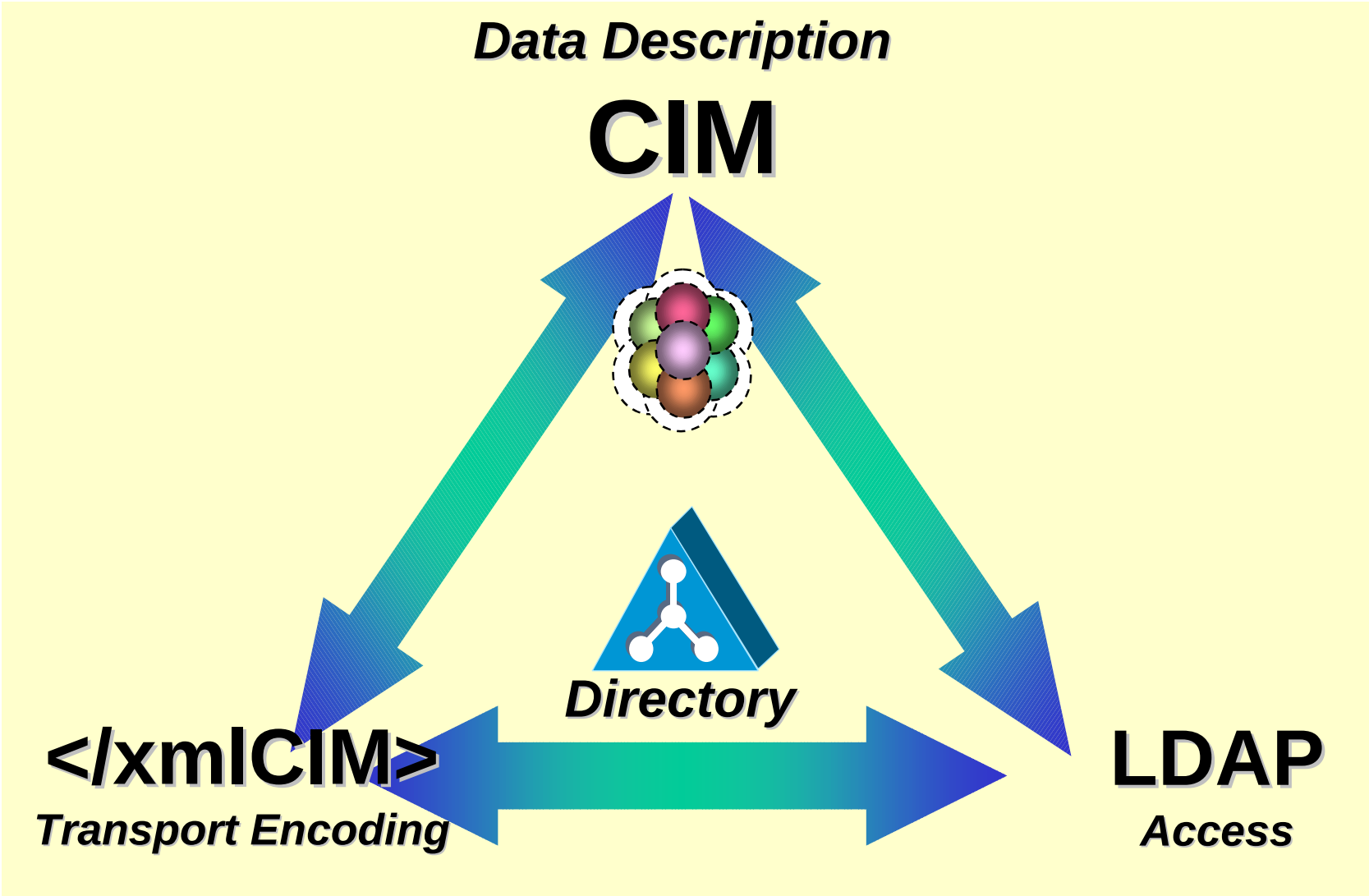


XML Transport of WBEM Data



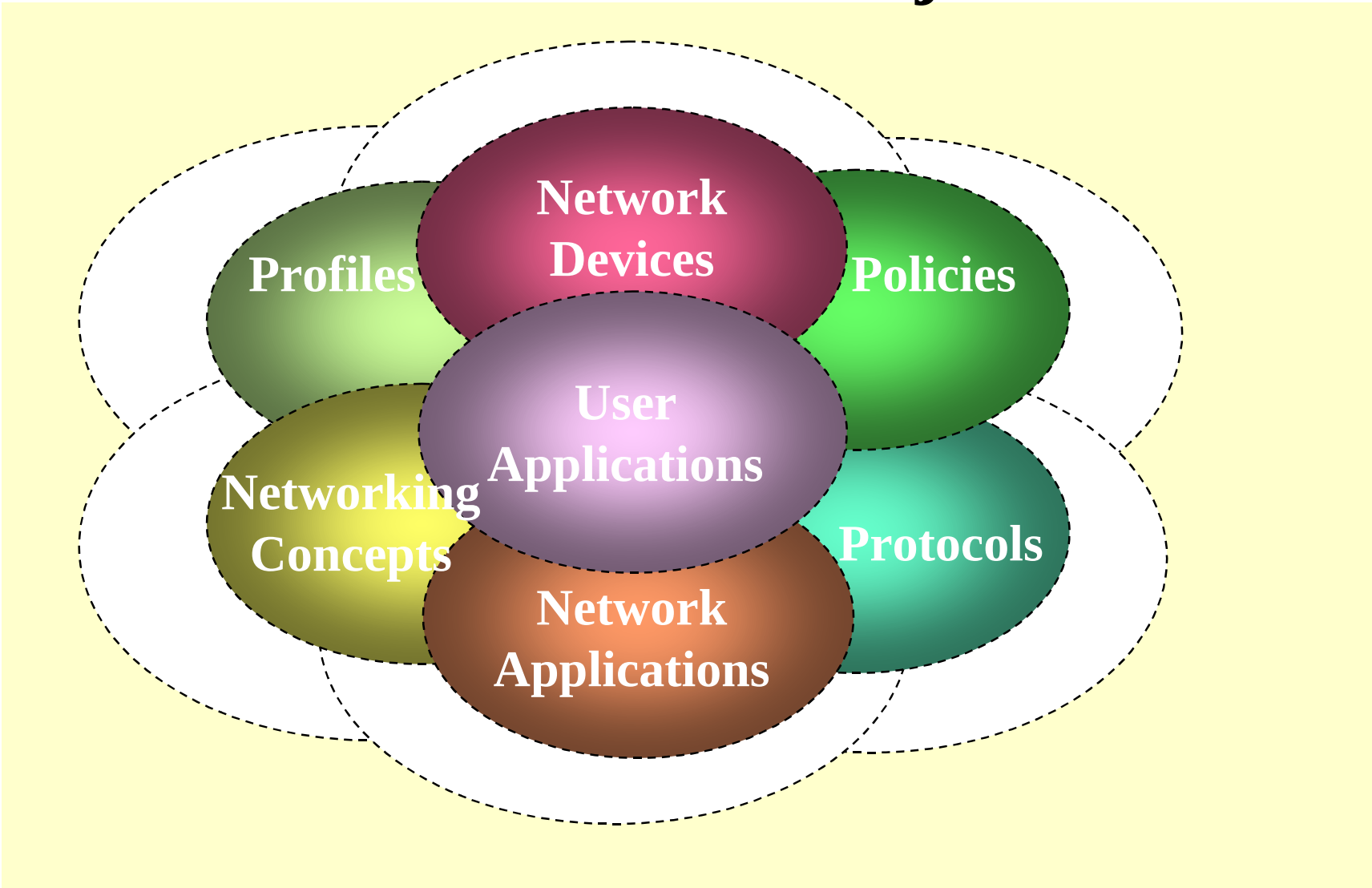
MOTOROLA

The DEN Environment
Directory Enabled Networks



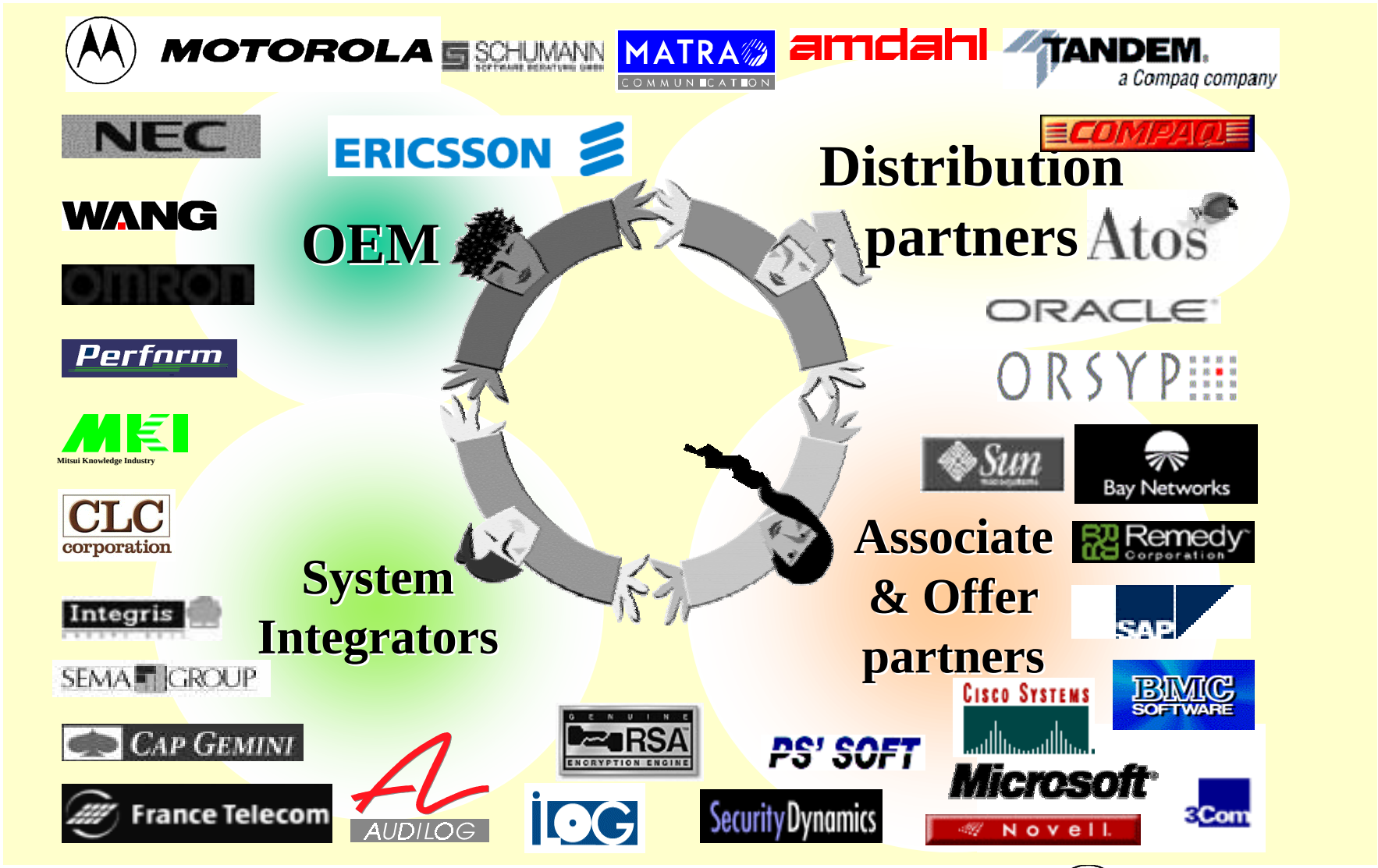
MOTOROLA

DEN Network Objects



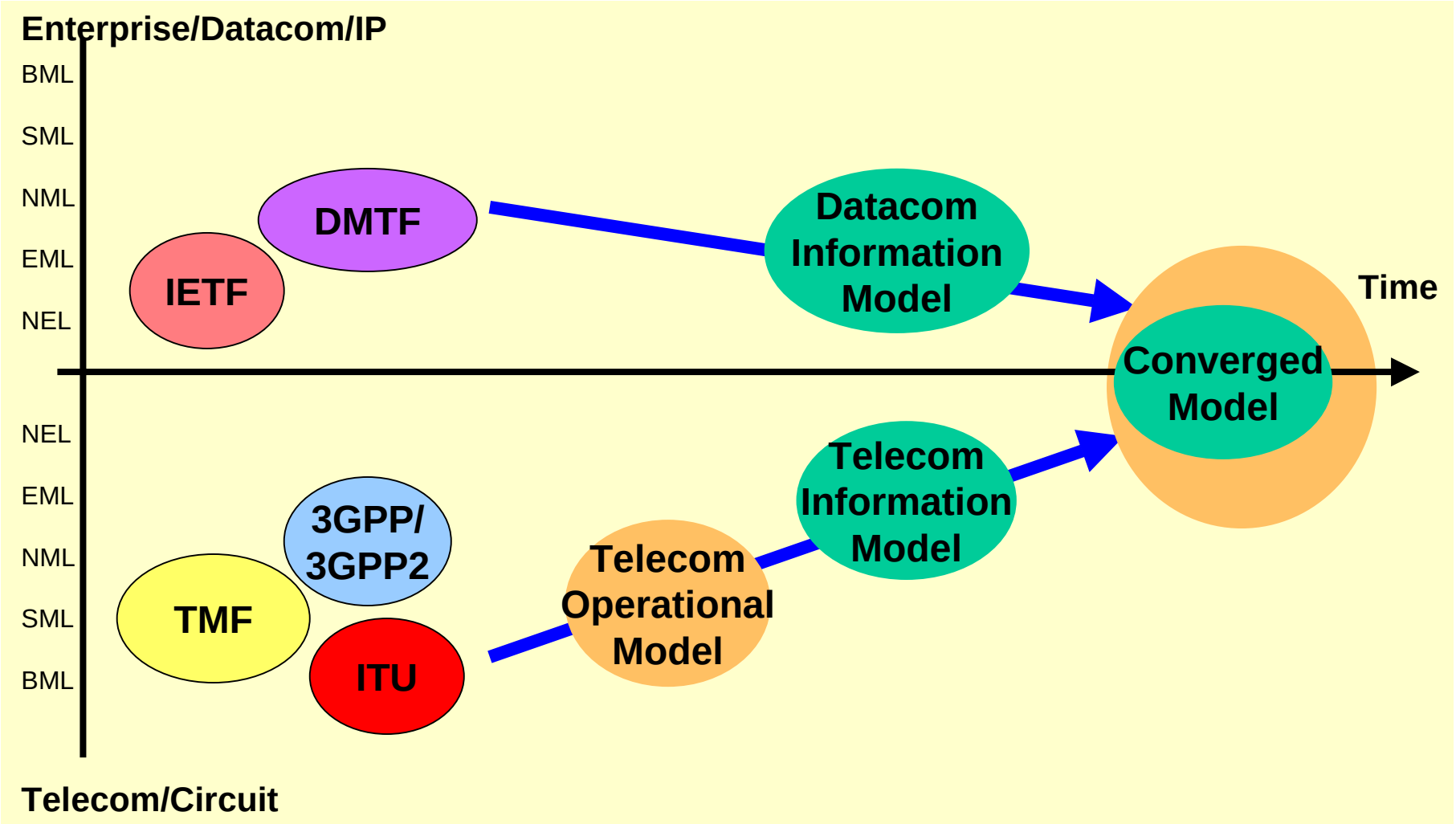
MOTOROLA

More than 100 partners worldwide



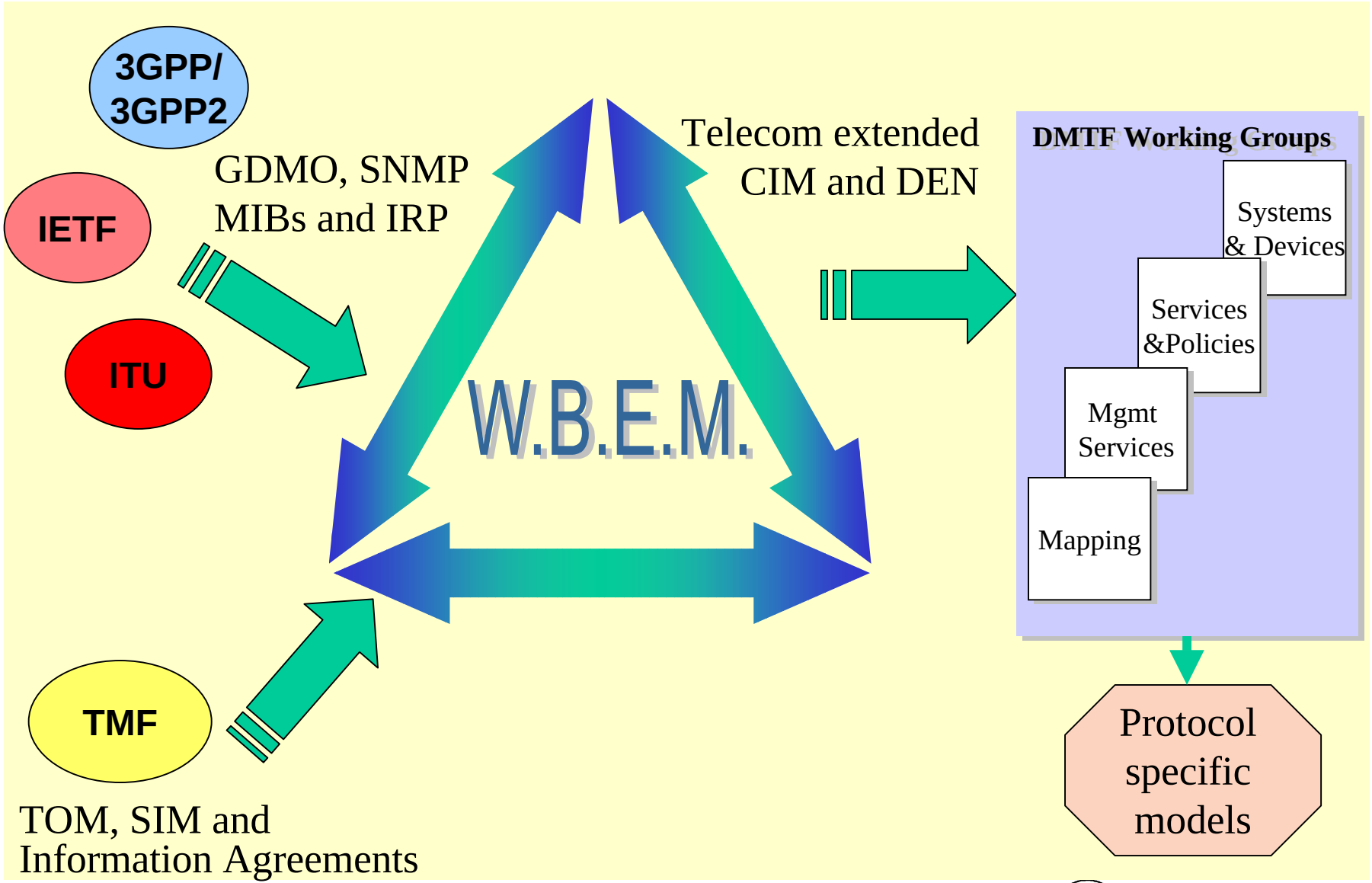
MOTOROLA

The convergence movement - what needs to happen in standards bodies



MOTOROLA

What needs to be done?



MOTOROLA

Call to Action

Get involved with the DMTF to get Telecom requirements into WBEM

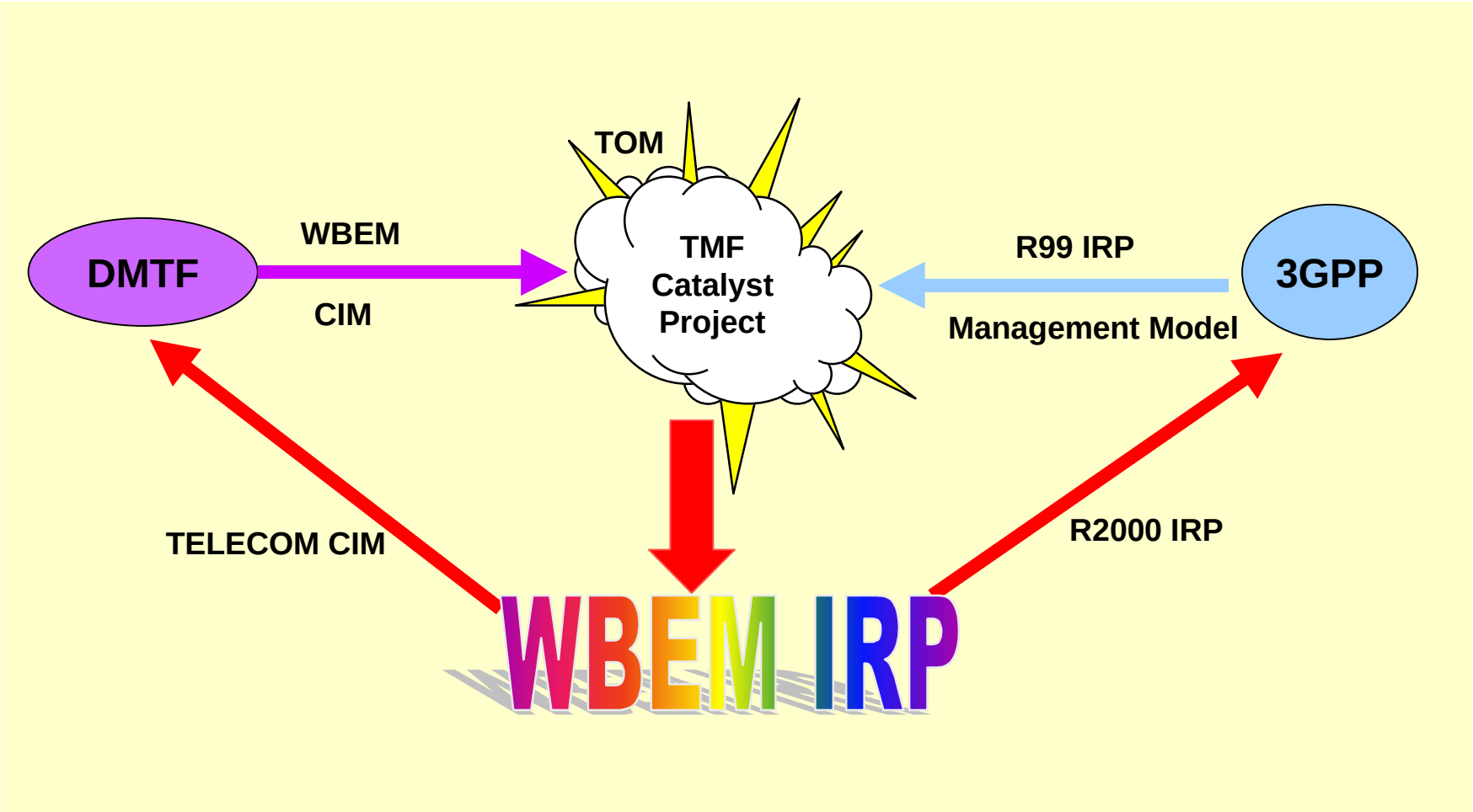
www.dmtf.org

Support the collaborative standards development efforts between 3GPP, DMTF and TMF

Plan your management solutions with WBEM technologies (CIM, XML, DEN) as key components

MOTOROLA

ACTION PLAN



MOTOROLA