ITS 220

SS7, AIN
Definitions

• SS7
  – Signaling System 7
  – Out-of-band data network

• AIN
  – Advanced Intelligent Network
  – Formalized use of SS7 to create new services
SS7 structure

![Diagram showing SS7 components]

where:
- EC  Exchange carrier
- SCP  Service control point
- SP   Signaling point
- SSP  Service switching point
- STP  Signaling transfer point

Figure 7–3  CCS and SS7 components.

From Ulyss Black, “ISDN & SS7”
Databases

• SCPs can store
  – Call management information
    • How to set up a call
  – Calling Card information
  – Information needed for wireless networks
  – And... anything the carrier needs for new/advanced services!
AIN

- SS7 databases (SCP) allow unlimited new services, but...
- How does the switch (SSP) know that a new service exists and to ask for information?
- AIN creates a standard way to introduce new services
  - Without possibly disruptive switch upgrades
AIN components

• “Triggers”
  - Every switch stops call processing at predictable steps and checks for AIN decisions to be made.

• Service Creation Platform
  - Software that allows a programmer to
    • Draw up a new service
    • Create triggers
    • Create the SCP databases