Maintaining the resilient infrastructure for global financial messaging

Gary M. Bertone
Director of Market Infrastructures
Banking Industry Division
Resilience: An ongoing challenge

“SWIFT has to be highest resilience, which means terrorist-proof — not that we can't be hit, but that we can bounce back.”

Leonard H. Schrank
CEO, SWIFT

... and threats similar to the SARS or avian flu pandemics should not take us by surprise.
A co-ordinated approach for maximum impact

**SWIFT ongoing actions**
- Internal programmes
- SAS 70
- SC3

**SWIFT customers**
- SWIFT Board
- Sibos and events
- Bilateral dialogue

**Industry at large**
- Critical infrastructures
- Regulators
- National authorities
- Overseers
Internal: Ongoing focus areas

- **Security**
  Ensuring a robust defense against physical threats and cyber attacks

- **People**
  Reviewing security practices

- **Crisis management**
  Assessing readiness to support customers in a crisis

- **Service continuity**
  Improving our operational resilience
Resilience Advisory Council (RAC, 2002-2005)

Achievements:

1. Defined industry requirements for bringing SWIFT to the next level of resilience
2. Co-ordinated SWIFT / industry issues around business continuity and management of large scale crises
3. Ensured SWIFT’s alignment with existing industry structures and initiatives
Areas of improved resilience at SWIFT

- New service continuity models
- Geographical dispersal of resources
- No ‘single point of dependency’
- Enhanced disaster recovery testing
- Cross-industry coordination and testing
SWIFT: Built-in resilience

- Managed and fully redundant networks
- Multiple operating and customer support centres on different continents
- BCP plans across all operations, tested and audited
- Company culture: ‘Failure is not an option’
Resilient user connectivity

- Multiple connectivity options, from dial up to multiple active configurations (SWIFT Education course available)

- Recommended
  - Connect to two network partners (major users)
  - Use Delivery Notification for critical transactions (5% traffic = 90% value)
  - Fallback connectivity testing

- Mandatory
  - Fast recovery (major users)
  - Disaster site (market infrastructures)
  - Define own level of resilience (other users)
Resilient IP network

- Multi-vendor IP network managed by SWIFT
- Risk spread across multiple network partners (AT&T, COLT, Equant, BT-Infonet)
- Dynamic routing across networks
- High diversification down to physical infrastructure
- High security and high reliability
- Global reach
- 24x7 monitoring

Customers should use multiple network partners where available
Resilient systems and facilities

- Multiple operating centres on different continents back each other up 24*7
- Each centre has built-in resilience for networks, systems and monitoring stations. Each centre can handle the full SWIFT traffic load
- Centre takeovers in 30 minutes, periodically tested, and audited by an external party
- Very unlikely for SWIFT to be unavailable
- Tested enhanced disaster recovery capabilities in case of total outage
Further increasing resilience

1. Enhance disaster recovery capabilities
2. Form SWIFT Crisis Coordination & Communication (SC3) Group

Assessed by external experts

Industry requirements & validation

Solution analysis & recommendations

SWIFT Board Decision 2003

Resilience Advisory Council

SWIFT
The SC3’s mission is to promote operational order in the financial community in the extreme circumstance of a total SWIFT outage, while SWIFT is busy restoring services.
SC3

- SWIFT Crisis Co-ordination and Communication group (SC3)
- Key channel to liaise with key financial markets during a major crisis
- Leverages existing industry crisis management structures
- Ensures timely and accurate two-way flow of information directly with the right decision makers in respective markets
A never-ending journey

- Very unlikely for SWIFT to be unavailable
- SWIFT has tested capabilities to restore services in an extreme situation
- SWIFT is constantly monitoring new threats and adapting to change

"Our vision is to be the lowest risk, highest resilience infrastructure for global financial messaging.”
— Leonard H. Schrank, CEO, SWIFT