Business Continuity in Telecommunication Sector with Legal and Regulatory aspects

Presentation by:

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AGENDA

- Business Continuity in Telecommunication Sector with Legal and Regulatory aspects
- Telecommunication network overview
- Key components, Emergency / Business Continuity / Crisis Management
- Business Continuity in Use Cases
- BCM Real Time Recovery Exercise –MSC Failover
- General evaluation

Business Continuity in Telecommunication Sector with Legal and Regulatory aspects

Business Continuity

- Ensuring the continuity of critical business processes includes holistic efforts to make the system operational again within the minimum downtime and data requirements foreseen in the event of failure
- It aims at identifying potential risks and their impacts, designing a process that creates resistance and requires effective intervention (including effective crisis management).

Benefits

- It protects the brand, customers, commercial reputation and value-creating activities.
- Provides legal and regulatory compliance.
- Prevents loss of profit, ensures continuity.
- Ensures commercial stability and creates confidence in the public.

Legal Review

- There is no specific law regulating business continuity.
- However, regulations in some areas is regulated by the states in the world and Turkey (secondary legislation) are available.
- In Turkey there are three main areas regulated.
  - Electronic Communication Sector
  - .Banking / Finance Sector
  - Energy Sector

Regulation Requirement

- The increase in liberal requirements
- The state has actively withdrawn from its monopoly areas,
- It has started to regulate these areas through private legal regime and independent state authorities.

Law # 5809 .

According to the law; national security and public order, and provisions of the special law on provision of electronic communication services in cases of emergency, martial law, mobilization, war and natural disasters.

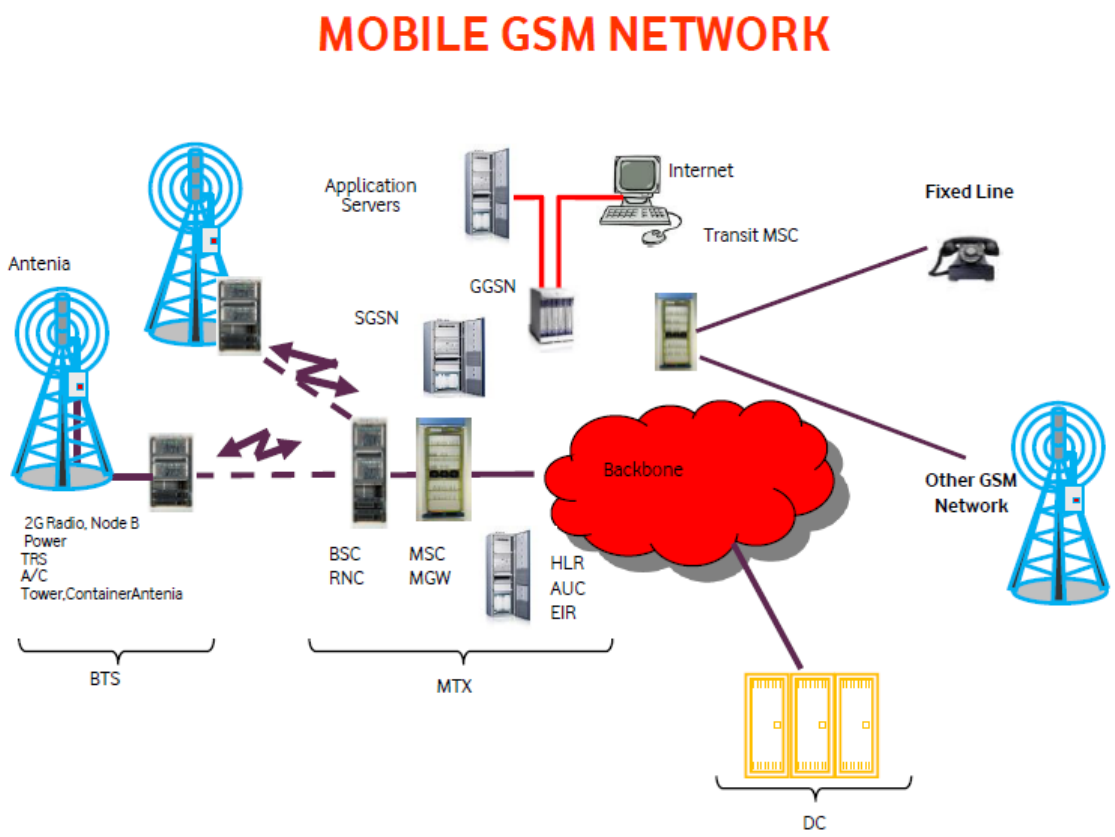
The relevant one of these principles is;
Qualitative and quantitative continuity must be ensured unless otherwise specified in the law or unless objective reasons require otherwise.

Regulative Sectoral Review

- In the Law, "Taking necessary measures to ensure uninterrupted communication in disaster situations."
- It is an important obligation left to the operators.
- **Ensuring business continuity is essential even in disaster situations.**

TELECOMMUNICATION NETWORK OVERVIEW

Mobile GSM Network



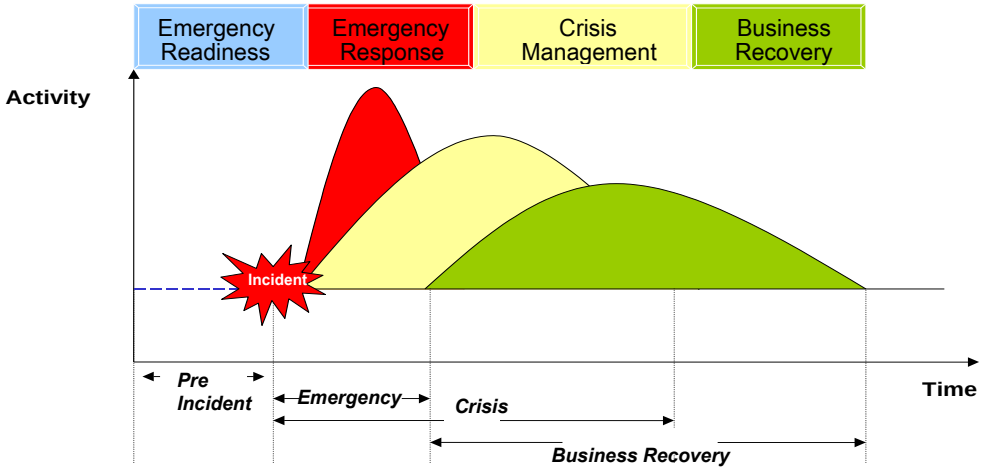
General Strategy in Disasters

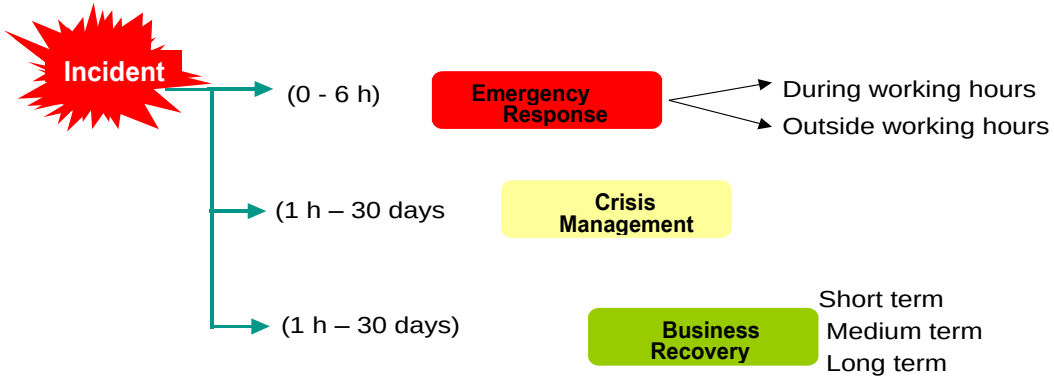
General Strategy in Disasters

- ❑ Assesment
- ❑ Business Resilience
- ❑ Recovery
- ❑ Social Responsibility

KEY COMPONENTS

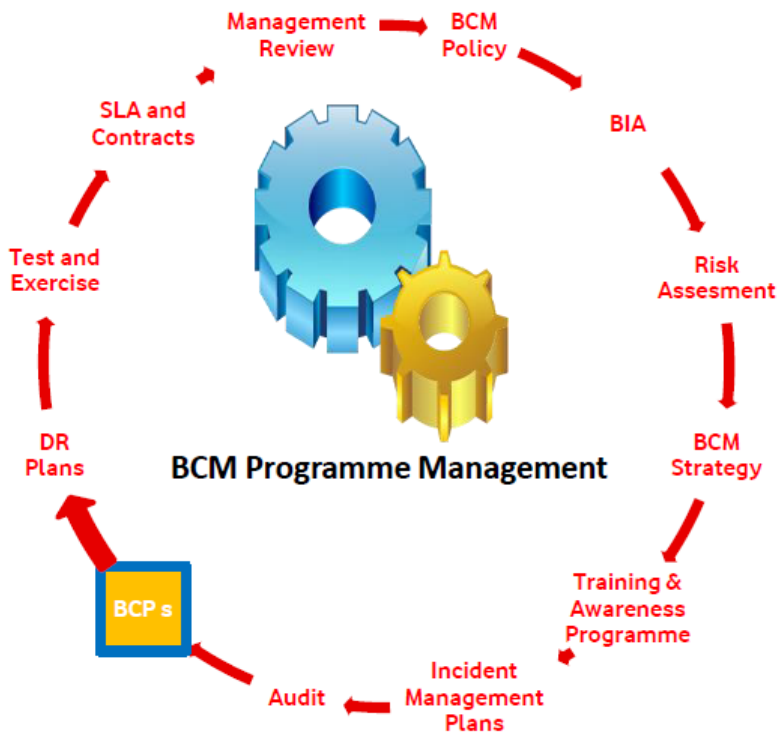
Emergency /Business Resilience / Crisis Management Process





Business Resilience

COMPONENTS OF BCM PROGRAMME MANAGEMENT –BUSINESS CONTINUITY PLANNING



MTX level BCP

vodafone

Network Operations

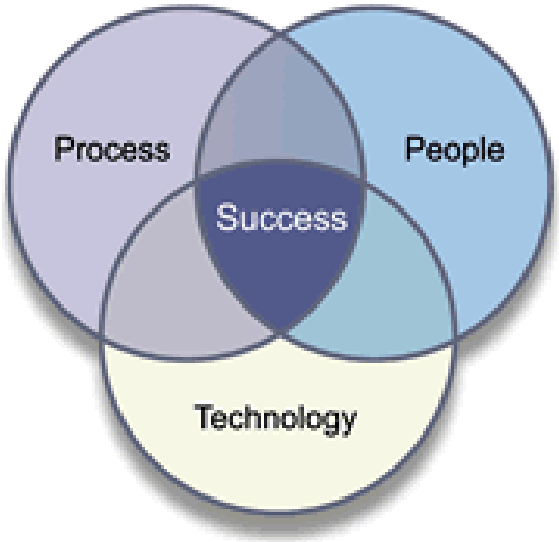
MTX Location Level

Business Continuity Plan

Technology ,Process,People

Being a pioneer of best practices
ISO 22301 ,22320 Framework

Corporate Organisational
Model, Well trained BCM
People



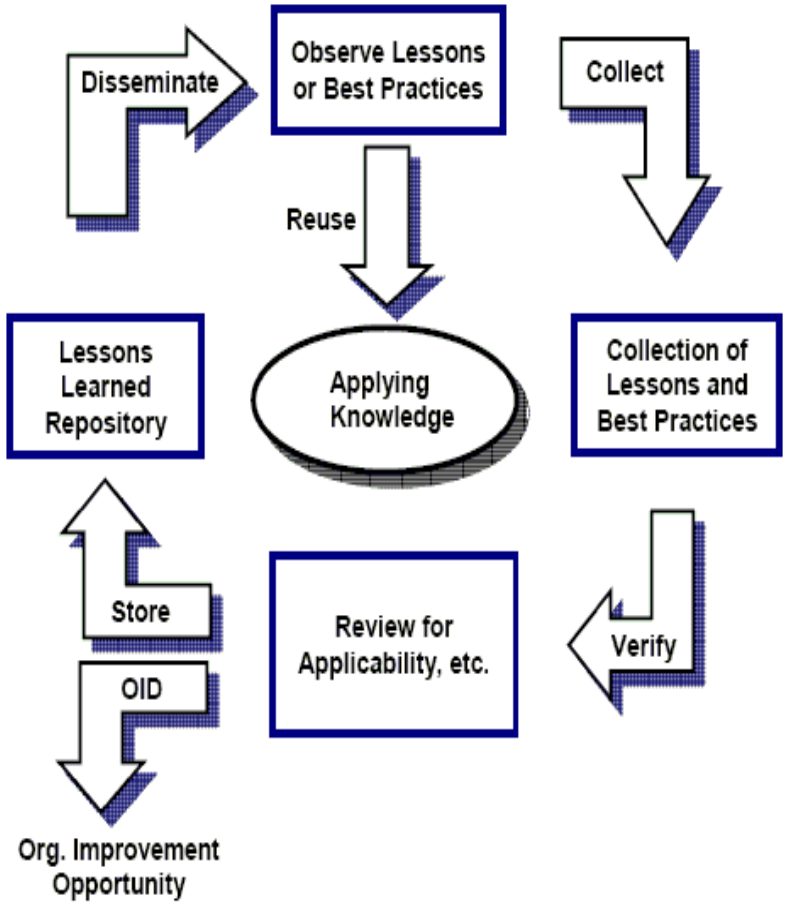
Geographical spread of
Technology, Business Resilience

Success Criteria

- Holistic model not **on 'heros'**
- Integration of Global standards into VFTR (ISO 22301,27001,PCI,SOX,9001) and manage them with consistent manner
- Provide business continuity with our key products and services to our stakeholders ,customers, people , and our liability against regulation
- Protect our reputation and enhance our brand value.
- Perform and accomplish corporate culture
- If there is a Crisis , believe that **there is no BCM**

BUSINESS CONTINUITY USE CASES

Business Continuity as Lessons learned



USE CASE	DATE
Van Earthquake	23-25 .10.2011
Samsun Flood & Network Storm	04.07.2012
Gezi Park Movement	28.05.2013
Some Mine Disaster	31.03.2014
Electricity Outage	31.03.2015
More	

Van Earthquake dated 23-25 October2011

Primary Tasks

- Mobile Base Stations sent and installed
- Crisis Desks Established
- VF Group Informed
- Contact with NGO and local authorities performed
- Blocked VF subscribers' lines opened
- Mobile store truck sent and gave service
- Free minutes ans SMSs were given away to the subscribers
- VF press bulletin distributed
- A-Ter extension performed, faulty ones detected and fixed
- Location information and signal tracking performed
- Pre-paid subscribers who were not able to perform calls because of out of credit situation were filtered out
- Alarm monitoring and periodic reporting has been performed
- Central optimization and planning team kept working at city center

Soma Mine Disaster

- 787 worker underground
- 301 worker died
- 4 days to complete rescue works

Soma Mine Disaster

- 6 Mobile BTS installed in Soma & 2 extra Mobile BTSs occupied for urgent case
- Crisis Desks Established at VDF Headquarter & İzmir Region & Tuzla (NOC)
- 22 Technical Staff took responsibility in Soma
- 2 Caravans sent to Soma for employee's accommodation
- Mobile Farmer truck sent and give service (provided cell phones and laptops to help meet communication)
- Free 100 minutes were given away to the subscribers in Soma
- Smart parameter adjustments considering the changing needs in network
- Capacity enhancement of BSC / RNC & all base stations in Soma
- 24/7 online monitoring of existing sites and mobile base stations

March 31st 2015 Power Outage

- World's 7th Largest Power Outage on History

March 31st 2015 Power Outage

- On March 31st 2015 10:36, three power plants in Turkey have been subject to subsequent system failures.
- Failures caused a decrease in total system power system and Frequency of Electricity dropped for whole Turkish Electrical Network, resulting in a very large scale Power Outage throughout country
- System Power has started to be reinstated to cities at 15:58 and gradually served to all affected cities.
- Energy was stored to all cities by 23:00

March 31st 2015 Power Outage

Crisis War Rooms are immediately established at HeadQuarters, Operation Center and Regions following the start of Power Outage

Crisis Team is formed by :

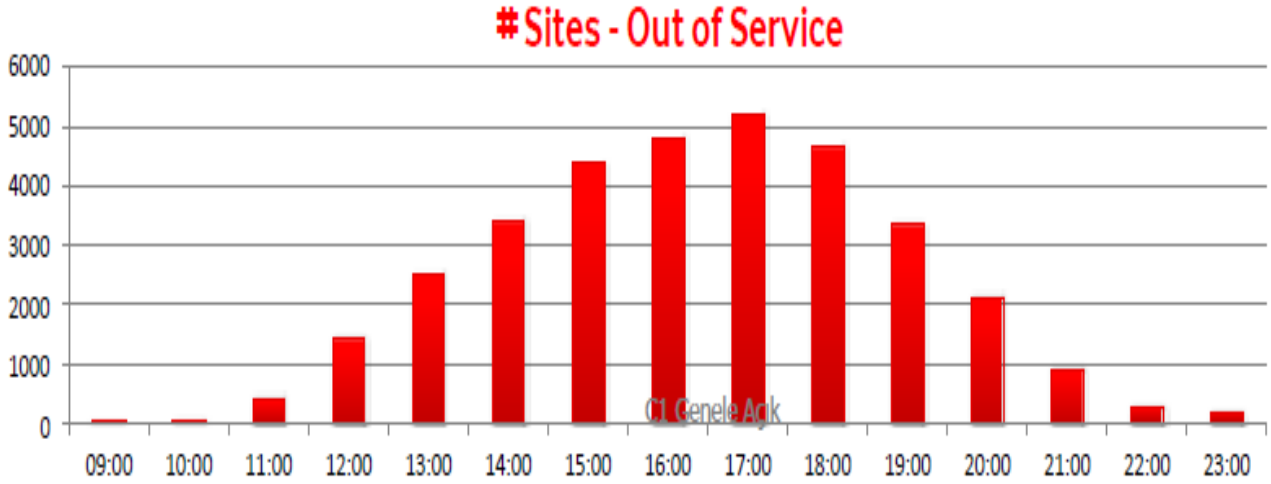
- Technology Quality and Service Assurance Teams
- Network Teams including Regions, Rollout, NOC and Network Planning
- Business Continuity Management
- Corporate Affairs including Stakeholder&Internal Communication and Corporate Communication
- Informantion Technologies - Technology Security Management
- Regulatory Affairs Management

March 31st 2015 Power Outage

Following actions are taken in order to extend backup power time by reducing power consumption, thus keeping site outages at lowest, ensuring high 2G availability and minimizing coverage loss

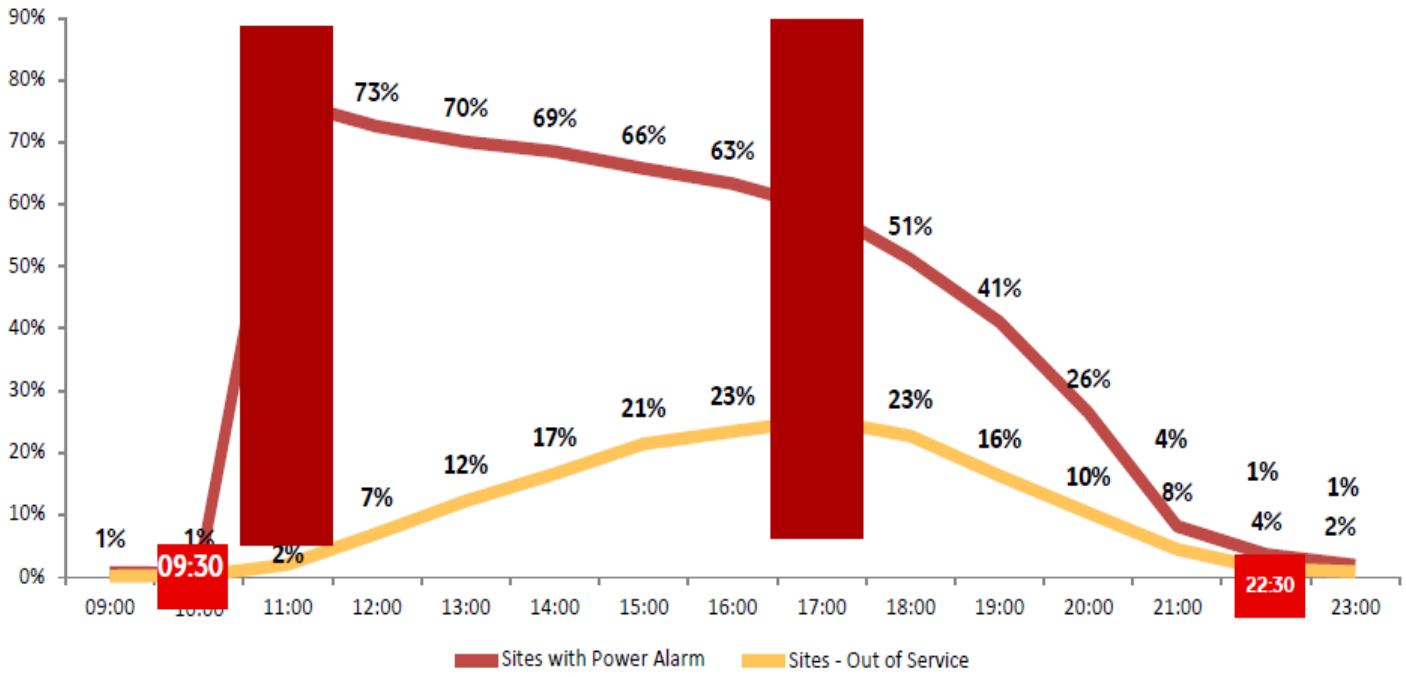
- **F3 frequencies** are shut down **(12:00)**, **F2 frequencies** are shut down **(13:00)**
- **3G service** were gradually locked to increase backup power duration for locations with battery life lower than %50 **(13:30)**
- TRXs were locked for **large number of cells** according to traffic density on sites **(15:00)**

March 31st 2015 Power Outage

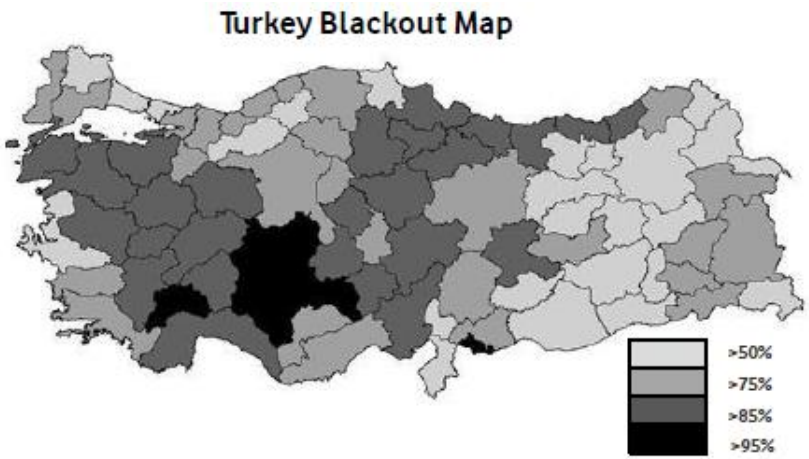


Business Continuity as Lessons learned

78% of Network have suffered from Power Outages



March 31st 2015 Power Outage



- All 81 cities experienced at least 50% power outages on sites
- 123k hours of power outage experienced
- 8 Hours power outage per site on average
- All MTX & DataCenter & All POP locations locations experienced power outages
- 120 cards on sites became dysfunctional due to constant electricity disturbances

March 31st 2015 Power Outage

- never considered nationalwide total blackout-
- Risk based approach always should be taken into account
- Supply chain management should be arranged for fuel and batteries
- Battery replacements should be made for meeting RTO Values (i.e. 4 hours/8 hours)
- Shops should have redundant power -
- Performing cross site /regional BC planning

BCM Real Time Recovery Exercise -MSC Failover

GENERAL EVALUATION

Why does an Eskimo need a fridge? If you can answer this question, then you will be able to sell BCM

"In The Beginning Was The Deed"

Faust , GOETHE

Thank you