



Turkey: Road to Gas Market

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`The interpretations, estimates and/or opinions reflect the judgment of the authors, not the Company`



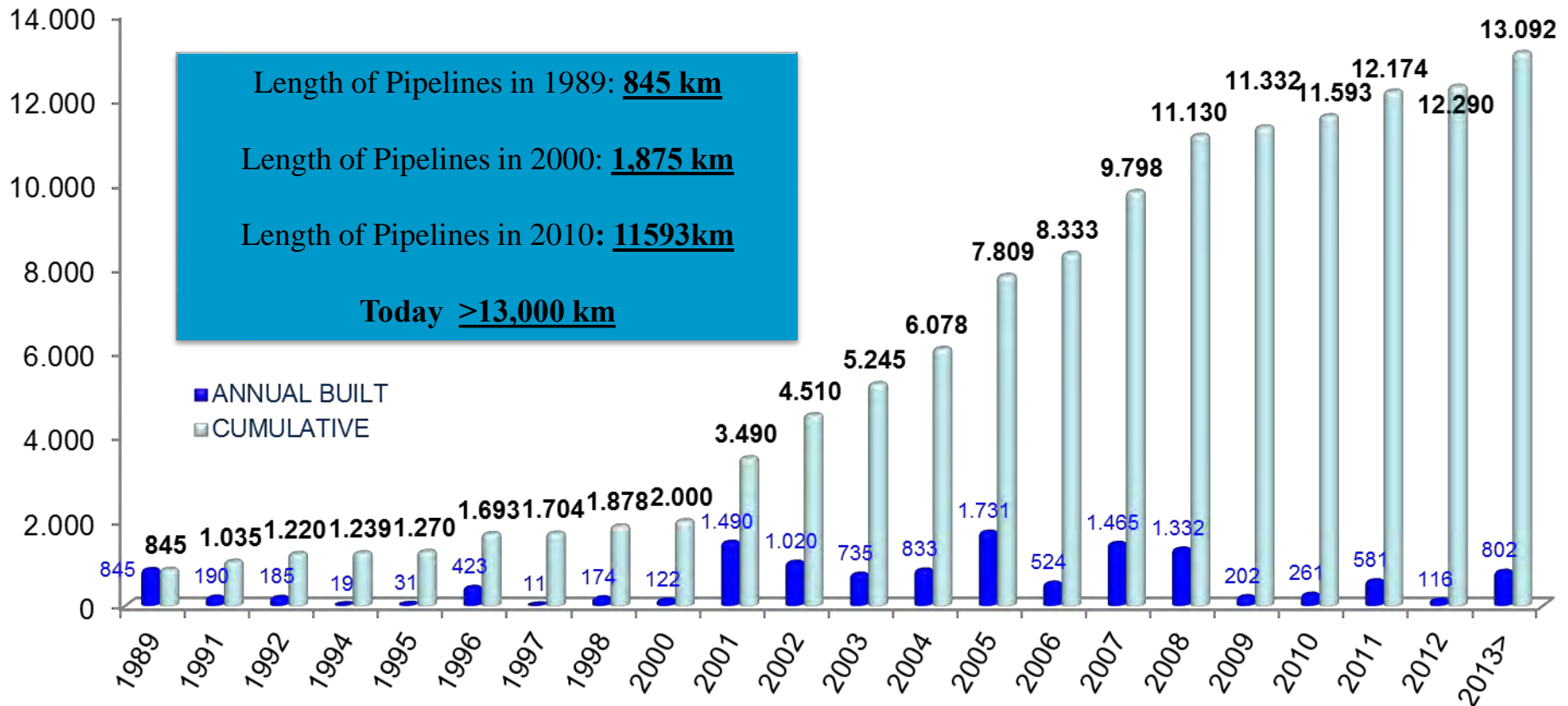
PIPELINE SYSTEM

DOĞAL GAZ VE PETROL BORU HATLARI

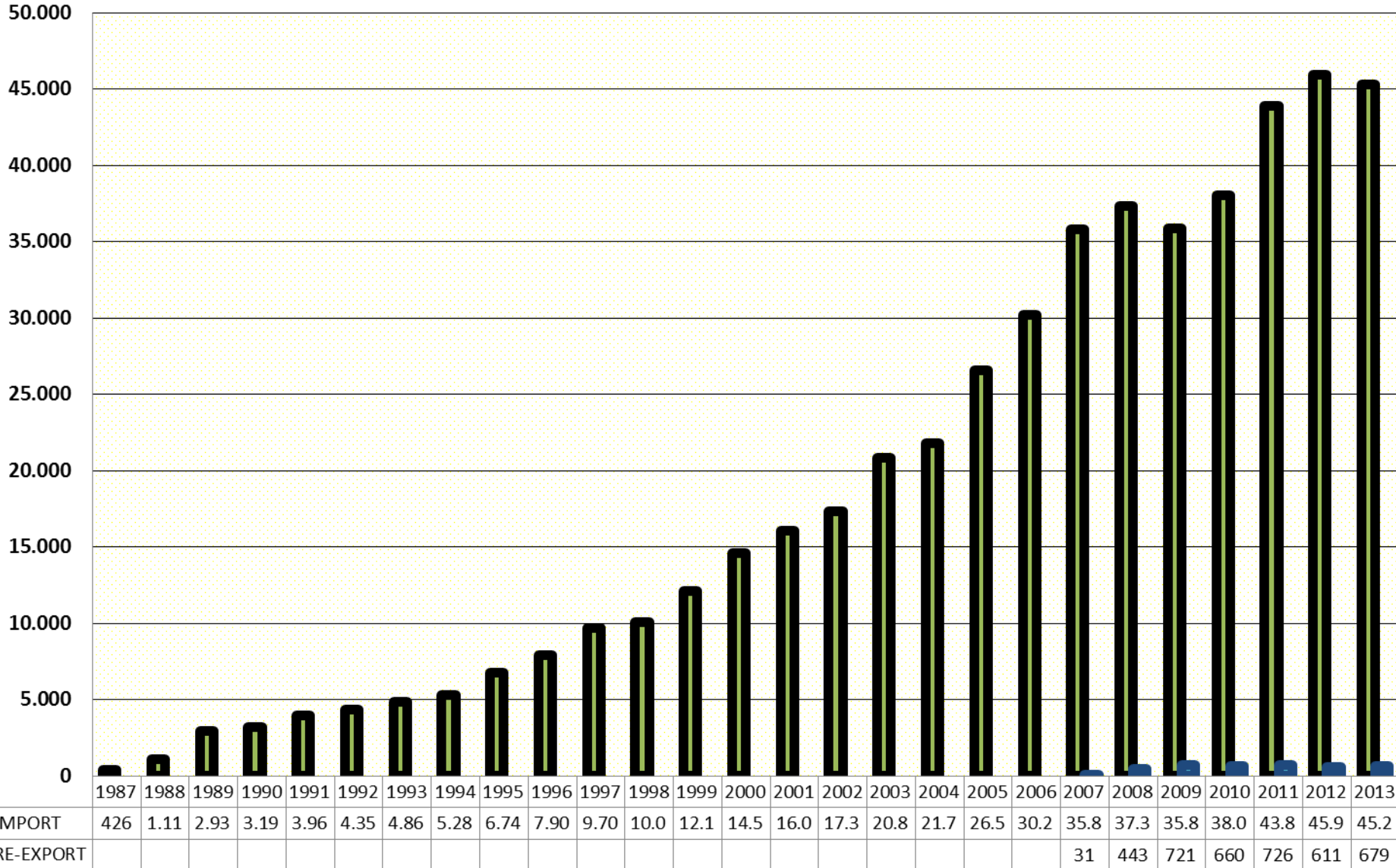


The Length of BOTAŞ Natural Gas Transmission Network

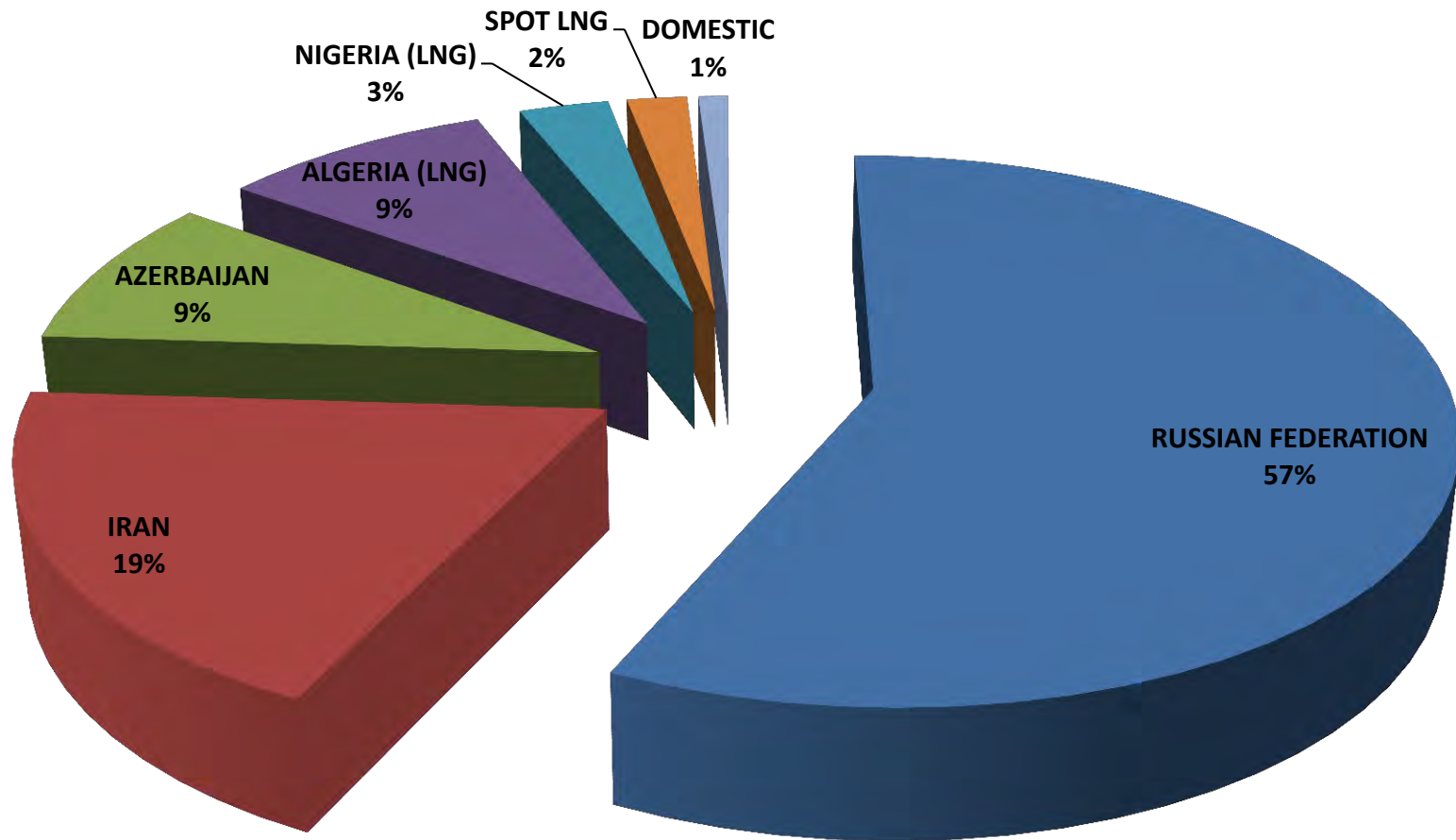
TRANSMISSION SYSTEM					
	2009	2010	2011	2012	2013
PIPELINE DISTANCE (KM)	11332	11593	12174	12290	>13092*
NUMBER OF COMPRESSOR STATIONS	8	8	7	7**	9**
FISCAL METERING STATINS (ADET)	8	9	9	9	9



Gas Import & Re-Export



Gas Supply Market Shares



GAS IMPORT CONTRACTS

- **BOTAS**

- Russian Federation Western Route 4 BCM
- Russian Federation Blue Stream Route 16 BCM
- Iran 10 BCM
- Azerbaijan 6.6 BCM S.D 1
- Azerbaijan 6.0 BCM S.D 2
- Algeria 4.0 BCM
- Nigeria 1.2 BCM

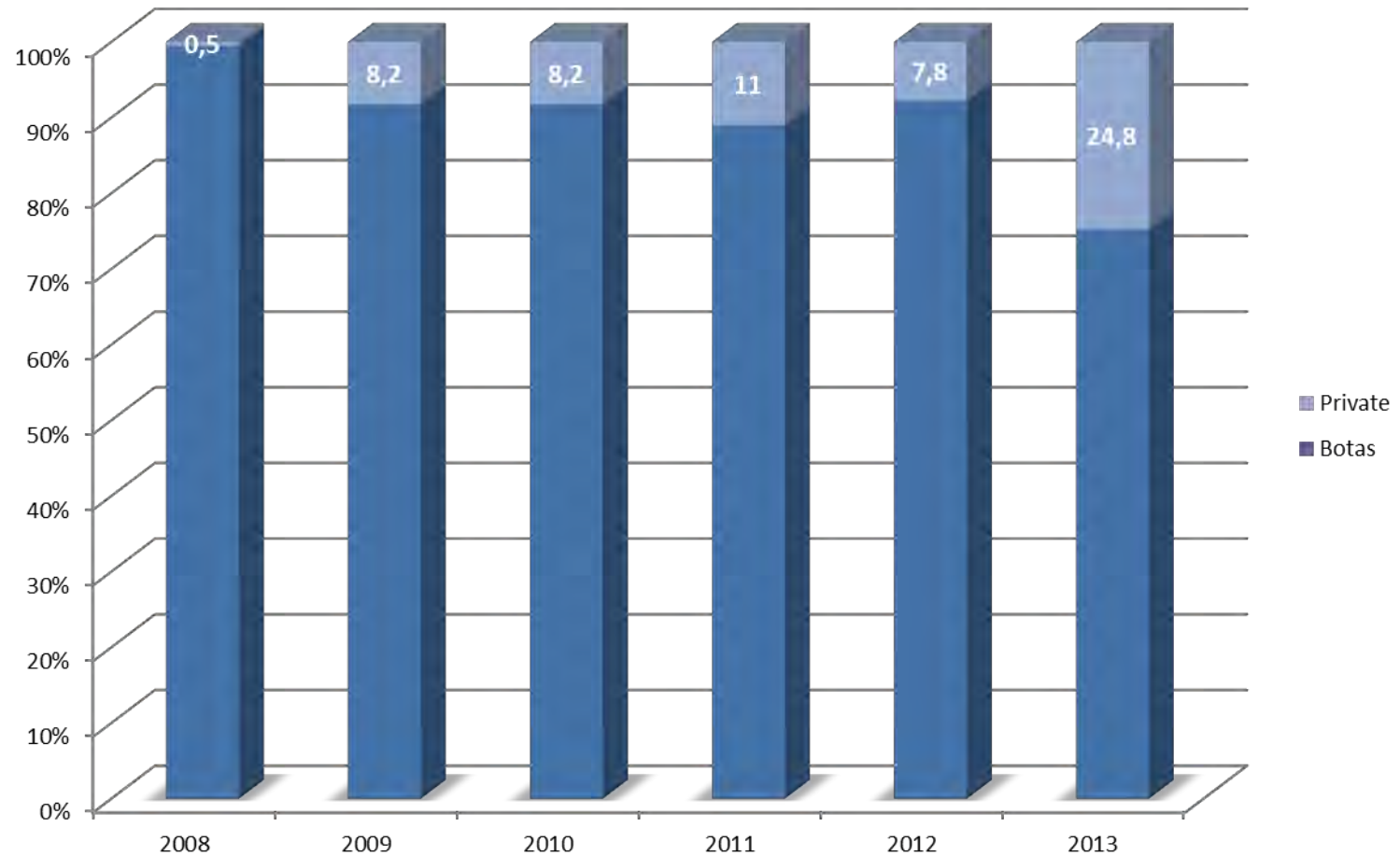
- **TOTAL 47.8 BCM**

- **PRIVATE IMPORTERS**

- Enerco 2.5 BCM
- Bosphorus 2.5 BCM
- Akfel 2.25BCM
- Avrasya 0.5 BCM
- Batı Hattı 1.0 BCM
- Kibar 1.0 BCM
- Shell 0.25 BCM
- Delivery of Socar at Entry Point 1.2BCM

- **TOTAL 10.0 BCM**

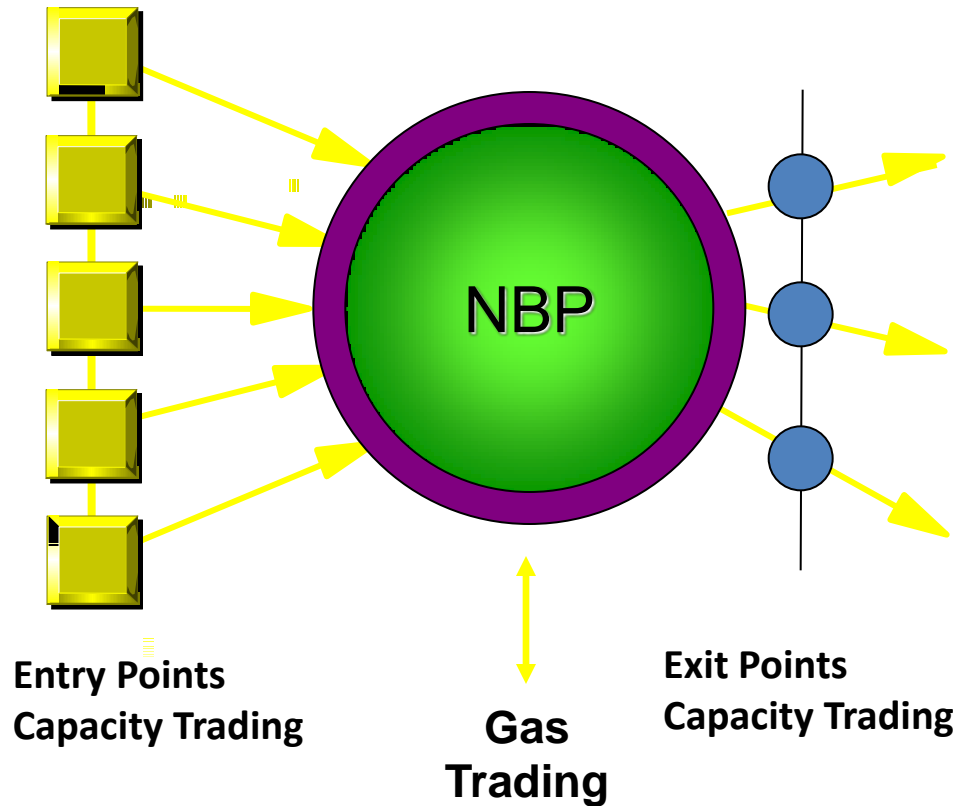
Annual Shares of Imports



2007	2008	2009	2010	2011	2012	2013	2014
Aksa	Aksa	Aksa	Aksa	Aksa	Aksa	Aksa	Aksa
Turcas	Turcas	Turcas	Turcas	Turcas	Turcas	Turcas	Aygaz
		Aygaz	Aygaz	Aygaz	Aygaz	Aygaz	Doğal
		Doğal	Doğal	Doğal	Doğal	Doğal	EWE
		EWE	EWE	EWE	EWE	EWE	Gazport
		Gazport	Gazport	Gazport	Gazport	Gazport	NaturGaz
		NaturGaz	NaturGaz	NaturGaz	NaturGaz	NaturGaz	Zorlu DG
		Pozitif	Pozitif	Pozitif	Pozitif	Zorlu DG	GDF Suez
		Zorlu DG	Zorlu DG	Zorlu DG	Zorlu DG	EnerjiSA	Hattuşa
			Akenerji	Akenerji	Akenerji	GDF Suez	Medgaz
			EnerjiSA	EnerjiSA	EnerjiSA	Hattuşa	Hipot
			GDF Suez	GDF Suez	GDF Suez	Medgaz	OMV Enerji
			Hattuşa	Hattuşa	Hattuşa	Zorlu Ted.	Odaş
			Medgaz	Medgaz	Medgaz	OMV Enerji	Angoragaz
			Zorlu Ted.	Zorlu Ted.	Zorlu Ted.	OMV Gaz	Global Energy
				OMV Enerji	OMV Enerji	Angoragaz	Erdgaz
				OMV Gaz	OMV Gaz	Erdgaz	Socar Gaz
					Angoragaz	Socar Gaz	Socar Turkey
					Erdgaz	Socar Turkey	Torunlar
							TT Elektrik
(2)	(2)	(9)	(15)	(17)	(19)	(19)	(20)

BALANCING REGIME

Virtual Points, Entry-Exit



NBP a “virtual point” between entry and exit

EMRA

Turkish Competition Authority (RK)

Direct Bilateral

OTC

Brokers

- Flexible & Bespoke Products

- Standard Contracts
- Financial Contracts

National Balancing Point (UDN)

BOTAS Transmission

System Balancing, Safety, Transport, Entry/Exit, Capacity Management

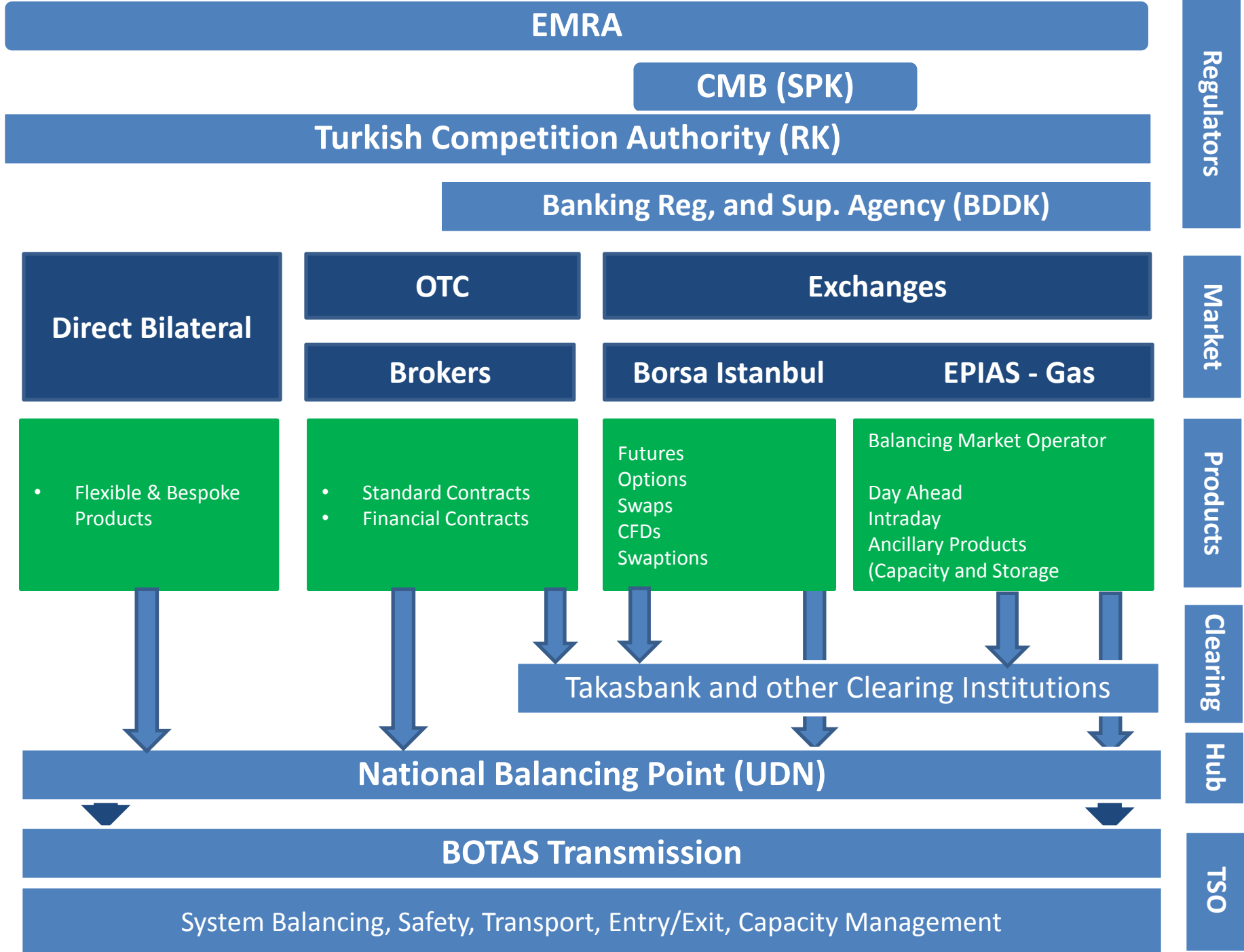
Regulators

Market

Products

Hub

TSO



EMRA

CMB (SPK)

Turkish Competition Authority (RK)

Banking Reg, and Sup. Agency (BDDK)

Regulators

Direct Bilateral

OTC

Exchanges

Market

Brokers

Borsa Istanbul

EPIAS - Gas

Products

- Flexible & Bespoke Products

- Standard Contracts
- Financial Contracts

- Futures
- Options
- Swaps
- CFDs
- Swaptions

- Balancing Market Operator
- Day Ahead
- Intraday
- Ancillary Products (Capacity and Storage)

Clearing

Takasbank and other Clearing Institutions

Hub

National Balancing Point (UDN)

TSO

BOTAS Transmission

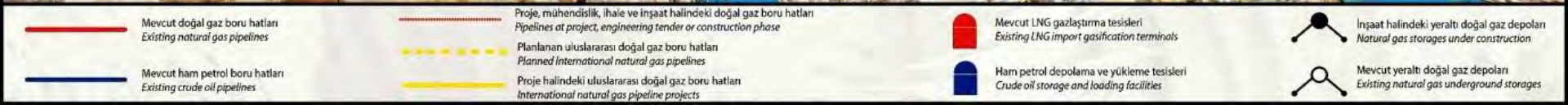
System Balancing, Safety, Transport, Entry/Exit, Capacity Management

CHALLENGES

- New Gas Supply Sources
- Pressure on price
- Structure of BOTAS
- Inadequacy of legislation and regulation
- Pipeline and Underground Storage Capacity
- Incentives towards storage and LNG terminal investments that require huge investments
- Amendment of Gas Law

SPECIAL ATTENTION TO THRACE





THANK YOU

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