

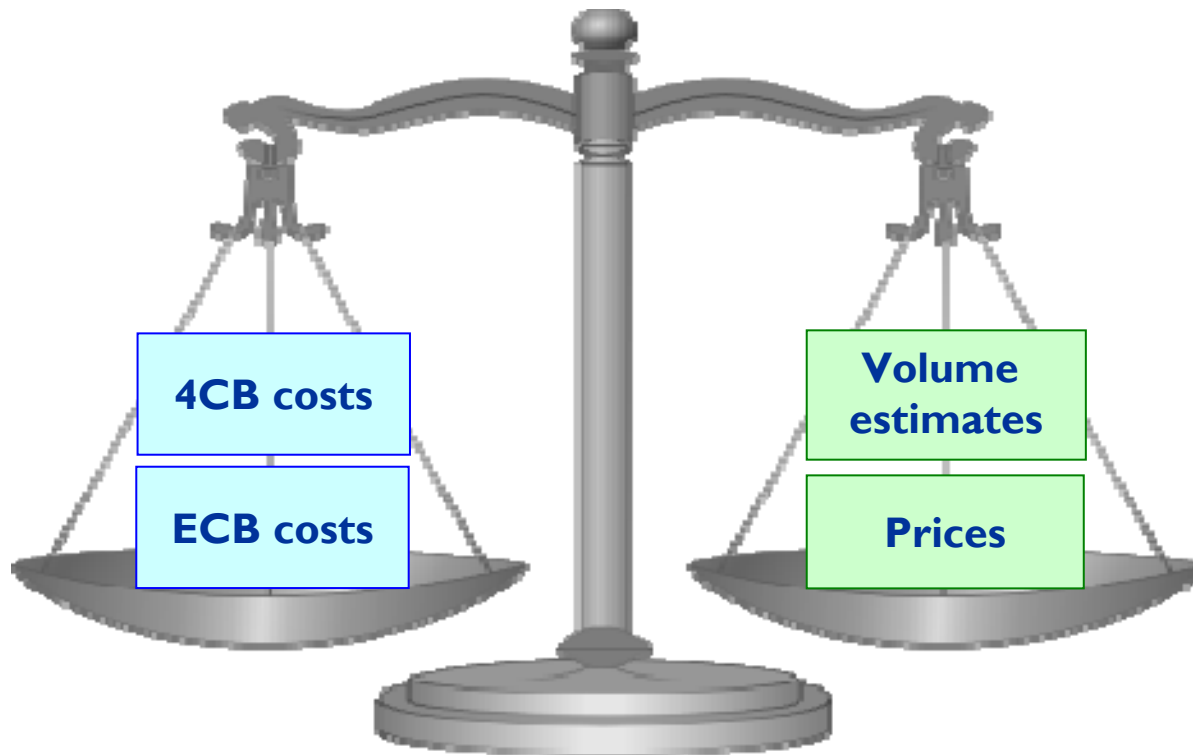
T2S Pricing

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Pricing Structure



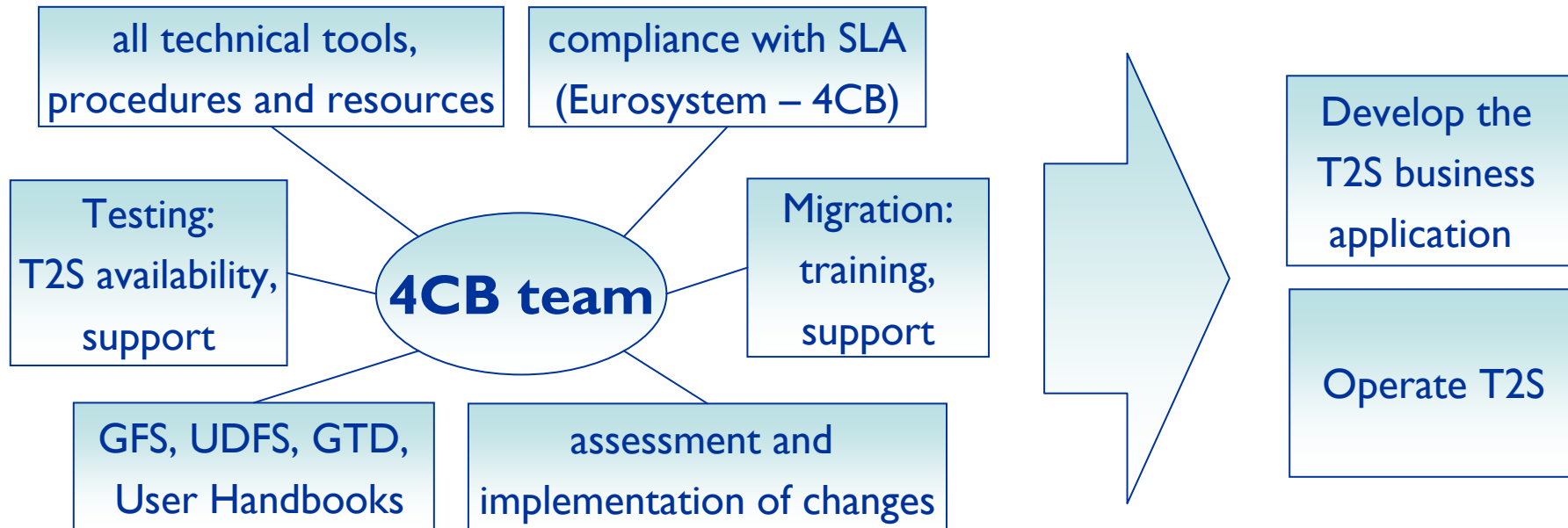
T2S Pricing

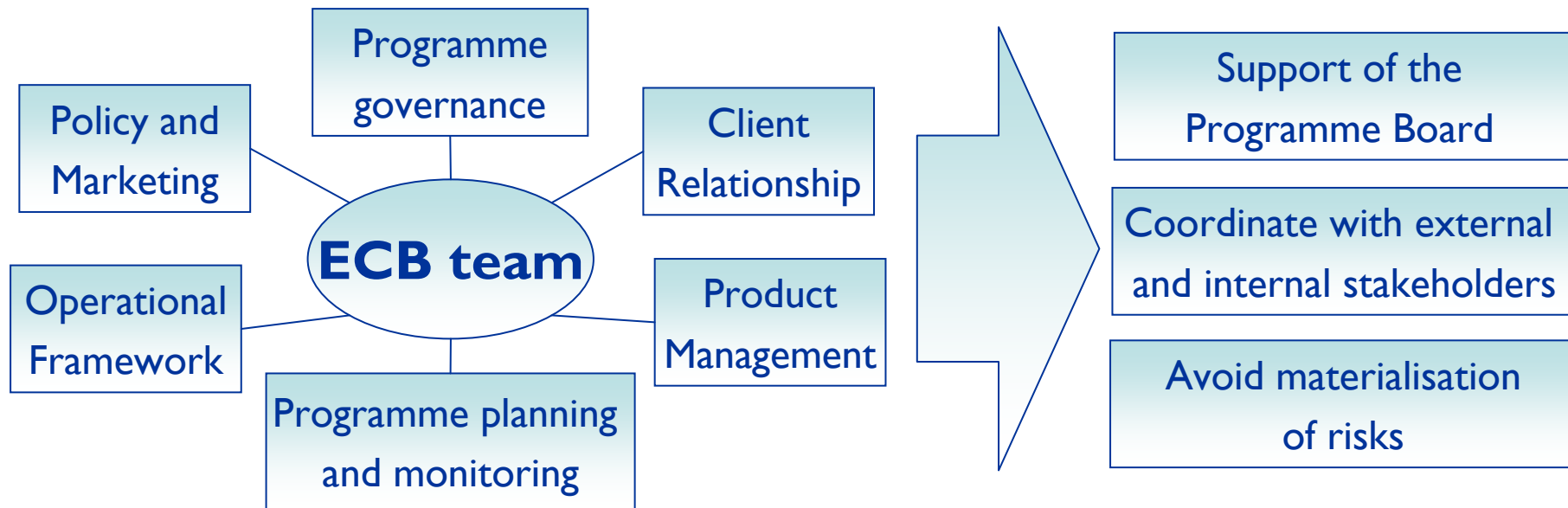
1 Costs

2 Volume estimates

3 Prices

4CB Costs





- Development phase (total, from Jan. 2008 to Sep. 2014):
4CB: € 256.4 million
ECB: € 90.2 million
- Migration and running phase (annual average, from Sep. 2014 to Sep 2021)
4CB: € 50.7 million
ECB: € 9.3 million
- Distribution of ECB cost over time:
- Capital cost over development and migration/running phase of eight years:
€ 90.7 million in total
- Contingency provision during migration and running phase:
€ 41.1 million over eight years

provisional - for discussion purposes only

T2S Pricing

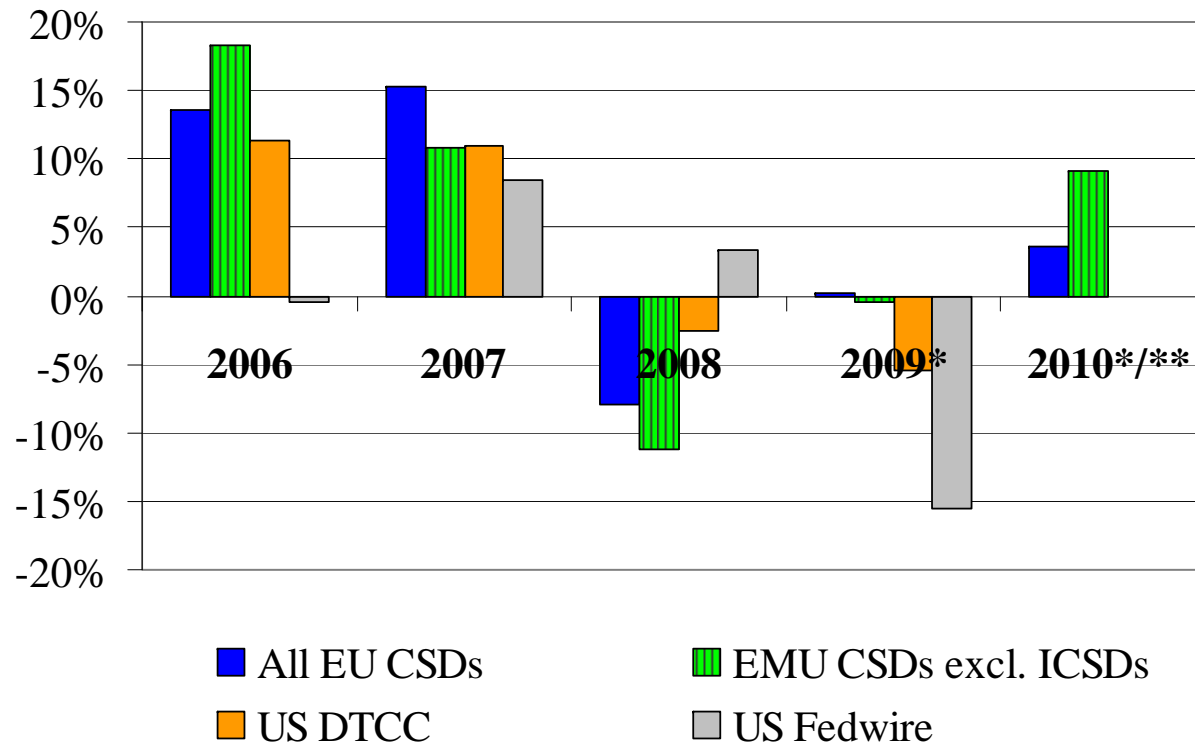
1 Cost

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Volume growth rates – Impact of the financial crisis

In comparison to 2008, the financial crisis reduced 2010 volumes by about 10%



Sources: ECB Blue Book, DTCC, Fedwire.

Note: *CSDs with CCP-introduction in H2 2009 not included in 2009 and 2010 growth rates.

**Annualised growth rates for HI 2010 based on T2S CSD settlement volume questionnaire. EU growth rate covers all CSDs having signed the MoU.

- **Significant data revision in July 2010:**
 - one CSD had reported instruction rather than transaction volume, i.e. actual volume is only 50% of the previously reported one
 - one CSD reported a mistake in its data collection for FoP settlement volume
 - one CSD reported a mistake in its data collection for settled securities transactions originating from corporate actions
 - One CSD reallocated transactions from corporate action-related transactions to retail investor account allocations and reported a higher figure
 - High uncertainty & financial risk for Eurosystem, CSDs and their users

- Total downward revision by about 10% (37.7 million transactions) of erroneously reported CSD volume for 2009

Adjustments for expected CCP-impact:

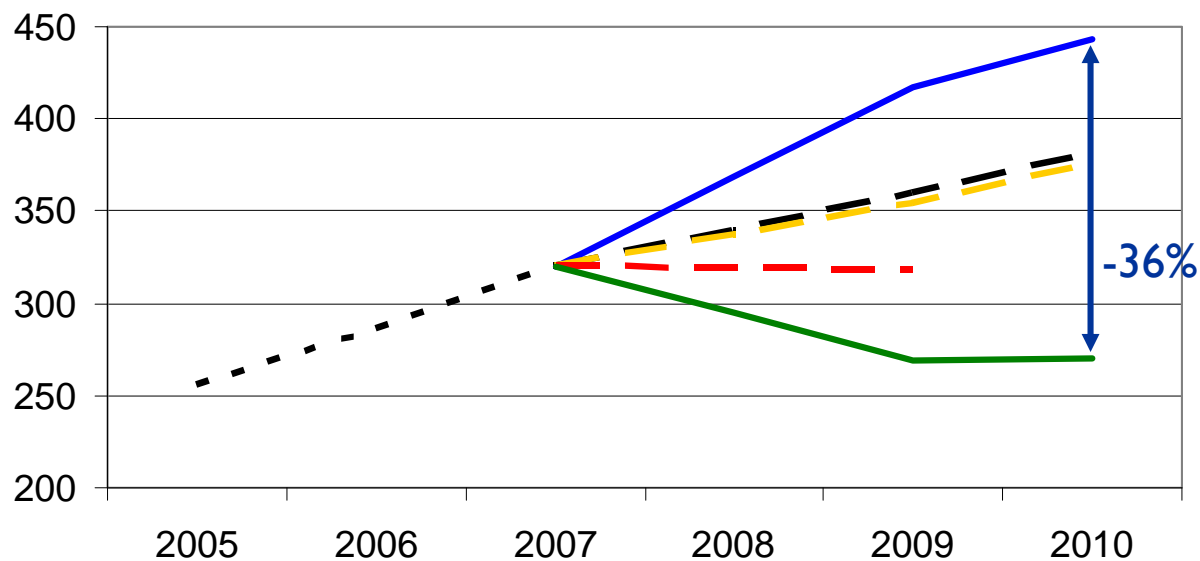
- DvP settlement volume reduction because of CCP-netting
- Recent CCP-introduction in four markets, two more markets are preparing for a CCP
- Estimates of a reduction between 60% and 90% of DvP settlement volume provided by affected CSDs
- Average of other CSD estimates applied to a CSD that provided no individual estimate

CSD in	Main CCP introduction
Denmark	October 2009
Finland	November 2009
Norway	June 2010
Poland	end of 2011
Sweden	September 2009
Spain	Tbd

Adjustments for expected impact of potential layered model in direct holding markets:

- Adaptation to T2S in DHMs under discussion
- Most CSDs did not feel in a position to provide a reasonable estimate since their adaptation plans are still too unstable
- Volume impact depending on current and future settlement process
- In the absence of concrete figures, assumption of an intermediate layered model scenario in which 50% of the direct holding market CSD volume comes to T2S in a non-layered model, 50% in a layered model:
→ 50% of DHMs' retail investor account allocations in T2S

Volume estimates – overview of changes



- ▪ EIA volume scenario euro area + DK, SE, CH, UK
- blue — incl. DvP/FoP volume of additional CSDs in MoU (30 in total)
- yellow — impact of the financial crisis
- red — reported DvP & FoP volume after revision by CSDs
- green — CCP-impact and intermediate layered model

Sources: T2S Economic Impact Assessment (EIA), T2S CSD volume questionnaire.

Notes: 2008 figures are interpolated between 2009 and 2007.

Volume estimates after adjustments:

(in million securities settlement transactions)

	Full 2010 (projected)
1) all euro settlement of euro area CSDs	146.6
2) all euro settlement and Scandinavian non-euro business	185.5
3) all settlement from CSDs having signed the MoU	271.4

Notes: calculations include the CCP-impact in Scandinavia, Poland and Spain and assume an intermediate layered model scenario in which 50% of the direct holding market CSD volume comes to T2S in a non-layered model, 50% in a layered model; projection for full year 2010 = adjusted reported volume H1 2010 + adjusted reported volume H2 2009 * growth rate H1 2010 over H1 2009 per individual CSD (yielding an aggregate growth rate of the projected H2 2010 volume of Ø of 1.2% over the adjusted reported H2 2009 volume); not all CSDs reported H1 2010 data; Sources: T2S CSD volume questionnaire, ECB calculations.

Estimates of future annual growth rates:

- Initial assumptions in 2008: business estimate of 6%,
- Preliminary reassessment by ECB T2S team in 2009: 5%
- March 2010: AG questionnaire

	Expected annual growth rates
2011	+3.2%
until T2S go-live	+4.7%
after T2S go-live	+6.3%

T2S Pricing

1

Costs

2

Volume estimates

3

Prices

T2S pricing structure - I

<i>Tariff items</i>	<i>DvP weight factor</i>	<i>Explanation</i>
		T2S always uses 2 instructions per transaction
Settlement services		
Delivery versus payment	100%	per instruction
Free of payment	60%	per instruction
T2S internal liquidity transfer	60%	per instruction
Account allocation	20%	per instruction
Matching	20%	per instruction
Intra-position / intra-balance movement	40%	per transaction (blocking, ear-marking, reservation)
Auto-collateralisation with payment bank	100%	for issue and return, charged to collateral provider
Intended settlement day failed transaction	100%	surcharge per business day failed per instruction
Daytime settlement process	20%	surcharge per instruction
Daytime - last 2 hours, i.e. 2pm to 4pm	0%*	additional surcharge per instruction
Auto-collateralisation service with NCB	0%*	for issue and return, charged to collateral provider
Instruction marked with 'top or high priority'	0%*	surcharge per instruction
Cancellation	0%*	per instruction
Settlement modification	0%*	per instruction

T2S pricing structure - II

<i>Tariff items</i>	<i>DvP weight factor</i>	<i>Explanation</i>
Information Services		
A2A queries and reports	25% of annual revenue	per reported business item in A2A report or query generated
U2A queries		per executed search function in U2A query generated
Message subscription services		per message exceeding a total of four messages per instruction
Account Management Services		
Securities account	0%*	a) monthly fee per ISIN in the account or b) monthly fee per account
New securities account	0%	
Cash account	0%*	monthly fee
New cash account	0%	
New standing liquidity order	0%	
Update limit (securities or cash)	0%	

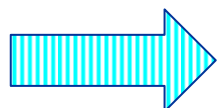
* These items will initially be set at a zero price, presuming that actual usage will be within an expected consumption pattern. However, should there be a stronger than expected use of the IT system resources which adversely affects T2S performance, it will be reconsidered to charge for these items. Such review will occur at regular intervals.

- **The T2S Programme Board presented a range of prices to the September AG, depending on**
 - which non-euro currencies are in T2S
 - the length of the cost recovery period
- Depending on the scenario, the price ranged from 12 – 24 cents per DVP instruction.

- **Based on the feed-back or the AG, the T2S Programme Board modified several parameters :**
 - Proportion of revenue to be generated from information services was increased from 20% to 25%
 - One year extension of the cost recovery period to 7 years of full operation (plus 1 year migration)
 - De-linking of the price from participation of particular non-euro currencies and instead targeting a certain volume share

- **The T2S Programme Board will propose to the Governing Council that the DvP price per instruction be set at 15 cents for the period Sept 2014 to end-2018 on the following conditions:**
 - non-euro currencies add at least 20% to the euro settlement volume;
 - the securities settlement volume in the EU is not more than 10% lower than the volumes projected by the T2S Programme Office, which in turn are based on market advice;
 - tax authorities confirm that the Eurosystem will not be charged VAT for T2S services.

- **For period Jan 2019 – September 2022:**
 - Still many unknowns, which make a price guarantee difficult
- BUT**
- Expected volume increases caused by dynamic effects
 - Percentage of non-euro currencies likely to be higher than 20%



The T2S Programme Board aims at further lowering settlement prices below 15 cents

- Nevertheless, even in the most unfavourable circumstances, Programme Board proposes that the Eurosystem commits that settlement fees will not increase by more than 10% p.a. for the four years after 2018.



Settling without borders