Brazil Technology Evolution Program - ICG

BZTE ICG - Architecture Blueprint November 9th, 2012



Document Approvers

Architecture Approvers	Area	Approval Date
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Patricia Sandez	ICG Regional Architecture	
Dharmesh Sethi	TTS Sector Architect	
Claudio Faco	BZTE Head	
Hugo Smitter	LATAM Regional Architecture	
Workstreams Approvers	Area	Approval Date
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Carlos Bertaska	FISME	5/9/2012
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Ana Lage	Regional Derivatives	5/2/2012
Leonardo Carrasqueira	Brazil PMO	
Guido Margiotta	AML SME	



Document Tracking History

Date	Version	Author	Comments	Reviewed by
11-Nov-2011	Initial	Patricia Sandez Donaldo Dagnone Jorge Huerta	Initial versions	Patricia Sandez
14-Nov-2011	2	Jorge Huerta Donaldo Dagnone	Changed flows with dashed lines indicating new interfaces.	Patricia Sandez Carlos Tassistro Amit Talati
15-Nov-2011	2.1	Jorge Huerta	Added coments sent by Carlos Tassistro & Amit Talati: improved pagination, references and box colors in diagrams. Added this slide.	Patricia Sandez
18-Nov-2011	2.2	Jorge Huerta	Added ALTO interfaces, started data dictionary.	Bhupendra Surana
22-Nov-2011	2.3	Jorge Huerta	Changed Slide 16 as per Bhupendra comments.	Bhupendra Surana Patricia Sandez
24-Nov-2011	2.4	Jorge Huerta	Changed arrowed-lines colors to correctly reflect the flow of data, remove dashed lines, remove multiple colors from roadmaps. Added approver slide separately from tracking history	Bhupendra Surana Luiz Urashima Carlos Alustiza
22-Dec-2011	2.5	Jorge Huerta	Changed slides 7 and 17 with Bhupendra and Shiva comments. Other slides updated as per changes done on those two. Added appendix with pending topics under discussion. Changed links between Flex/C900/RBCS in all slides. Changes suggested by Enid G: removed Channel Finnance & Felxcube offshore, added trade system in Loans and in CM replacing Flex FX., added OFSweb in slide 7 to show link with DDA. Added appendix with open items under discussion.	Donaldo Dagnone
17-Jan-2012	2.6	Jorge Huerta	Reviewed flows directions and added new colors for arrows. Added new slides to detailed Balance checking. Removed Exceller link to Cosmos. Reviewed Secore integration. Action items moved to a separate spreadsheet. Removed Global Billing.	Patricia Sandez Donaldo Dagnone

Document Tracking History

Date	Version	Author	Comments	Reviewed by
16-Mar-2012	2.7	Jorge Huerta, Donaldo Dagnone	Added global systems GRR, MANTAS. Removed RBCS and diagrams were adjusted. Added common busses, Cosmos applications to remain, CALM, update balance checking flows.	Bhupendra Surana, Patricia Sandez, Andres Travetto.
28-Mar-2012	2.8	Jorge Huerta	Corrections in MANTAS, CRC and Flex links and added TLM, RH, CIBE as LCB Channel. Changed integration with AML/GIW. Changed Balance checking flows.	Nikhil Shah, Iris Mena, Patricia Sandez
30-Mar-2012	2.9	Jorge Huerta, Donaldo Dagnone	Changed links of GIW, add missing link Flex-C900. Added new states in the solution roadmap and re-layouted boxes to make it clearer.	Donaldo Dagnone, Isabel Roca, Enid Gonzalez.
13-Apr-2012	3.0	Jorge Huerta Donaldo Dagnone	Added GBS. Reviewed ALTO diagrams adding local systems. Changed flow to OPTIMA from Genesis. Added eDelivery as email delivery solution.	
27-Apr-2012	3.1	Jorge Huerta	Remove online integration with TRIMS. Remove TCL from final stage. Added RCO in roadmaps. Changed P2P as global app. ALTO integration updated as per meeting on April, Wed 25th.	Bhupendra Surana, Amit Talati, Patricia Sandez, Donaldo Dagnone.
9-May-2012	3.2	Jorge Huerta	Added Referential Data and removed CitiSwitch in ALTO diagram.	Donaldo Dagnone, Claudio Faco, Amit Talati. Fabian Garcia S.
9-May-2012	3.3	Jorge Huerta	Added scenario of Flexcube entering before ALTO. Added missing link between RC+ and eDealer in MM diagram. Changed timeline in slide 17. New updated diagrams for ALTO & Flex integration with 2 posible scenarios.	Iris Mena, Enid Gonzalez, Leonardo Barbalace, Andres Traveto
28-May-2012	3.4	Jorge Huerta	Reviewed colores in slide 7. Clarified balance checking account's flows in end-state diagrams. Added Mantas in Flex DDA diagram. Reviewed CIBE integration. Reviewed ALTO and GIW diagrams.	Donaldo, Dagnone Humberto Yokohama

Document Tracking History

Date	Version	Author	Comments	Reviewed by
6-Jun-2012	3.5	Jorge Huerta, Donaldo Dagnone	Added CIW into diagrams. Reordered solutions roadmaps according to new timelines.	ALTO workshop participants
19-Jun-2012	3.6	Jorge Huerta, Donaldo Dagnone	Reviewed ALTO diagram: removed RU, CE, DF. Changed flows with TI. All diagrams: added Brazil Bus.	ALTO workshop participants
29-Jun-2012	3.7	Jorge Huerta, Donaldo Dagnone	Added Citiconnect in Flex diagram to show repository of beneficiaries, added link from EBO to BWPagee. Remove CitiGL from Flex and ALTO diagrams.	Donaldo Dagnone, Patricio Duco
16-Jul-2012	3.8	Jorge Huerta, Donaldo Dagnone	Updated MM diagram with backbone and ALTO. Added backbone in Finance diagram. Renamed Brazil Bus to Latam Bus. Updated roadmap diagrams.	MM Workshop, Yogini Joshi, Carlos Alustiza
20-Jul-2012	3.9	Jorge Huerta, Donaldo Dagnone	MM diagram was reviewed and agreed. Link from Flex DDA to CIW was removed and added CRC to CIW. Removed Channel FI integration with Flex DDA. Removed ALTO link to CitiGL/Genesis from slides15 and 20.	GBS Workshop
27-Jul-2012	4	Jorge Huerta	Removed link from Flex DDA to GBS and added between GIW and GBS in all diagrams.	Donaldo Dagnone
10-Aug-2012	4.1	Jorge Huerta	Added eCIF between Starts and Flex DDA	LATAM Bus workshop
30-oct-2012	4.2	Jorge Huerta	CIBE and OASYS needs the splitter functionality of the LATAM Bus to interact with Flex DDA and GRB. SVS Latam was added and ASP needs to receive its current feed from Flex DDA through LATAM Bus.	Referential Data workshop, Monica Miranda, Donaldo Dagnone, Cecilia Marini
9-Nov-2012	4.3	Jorge Huerta	Changed LATAM Bus and Backbone color in every diagram. Added Referential Data solution. Re-layouted boxes in Flex DDA diagram. Loans diagram reivsited. Roadmaps updated.	



BZTE - ICG Referential architecture

- The objetive is to document :
 - High level interaction between ICG global, regional and local product processors and Flexcube DDA, GL, Credit &Risk and global and regional DWHs.
 - Changes in the interaction that product processor should consider in the different phases of the BZTE project, protocols and most important retirements.
- This document should be considered as a baseline and changes in diagrams included in the document will be tracked by BZTE PMO.
- Level of granularity is expected to be increased after review this document with workstream leaders



BZTE - ICG Architecture Guidelines

- 1. Flexcube DDA will be the golden source for :
 - Account
 - Customer accounts
 - Accounts balances
 - Referential data (unless strategic golden copy in other application)

2. Interfaces.

- Direct interface with Flexcube DDA through Flexibus (Tibco/Abinitio) is expected to be used in Global system and Regional systems. All other local applications would interface through the LATAM BUS with Flexibus.
- Local non-strategic application should maintain current interfaces

3. Middleware.

- Flexibus (Tibco/Abinitio) will be the middleware goto solution
- New middleware layer should NOT be created
- Actual middleware layer will be replaced after GRB replacement

4. ICG Product processor

- All product processors have to create an
 - Interface with Flexcube DDA
 - Interface with Finance Backbone for accounting
 - Those PP's supporting GCG customer account transaction should interact with GRB during 29 months

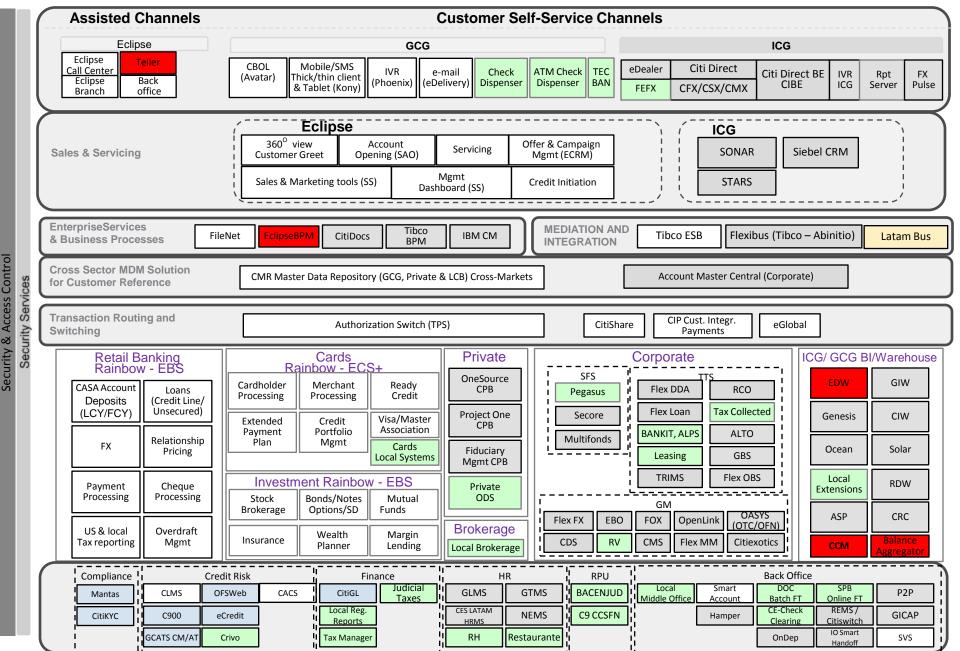


Brazil Referential Architecture View

GCG G/R System GFTS System

ICG G/R System Local System

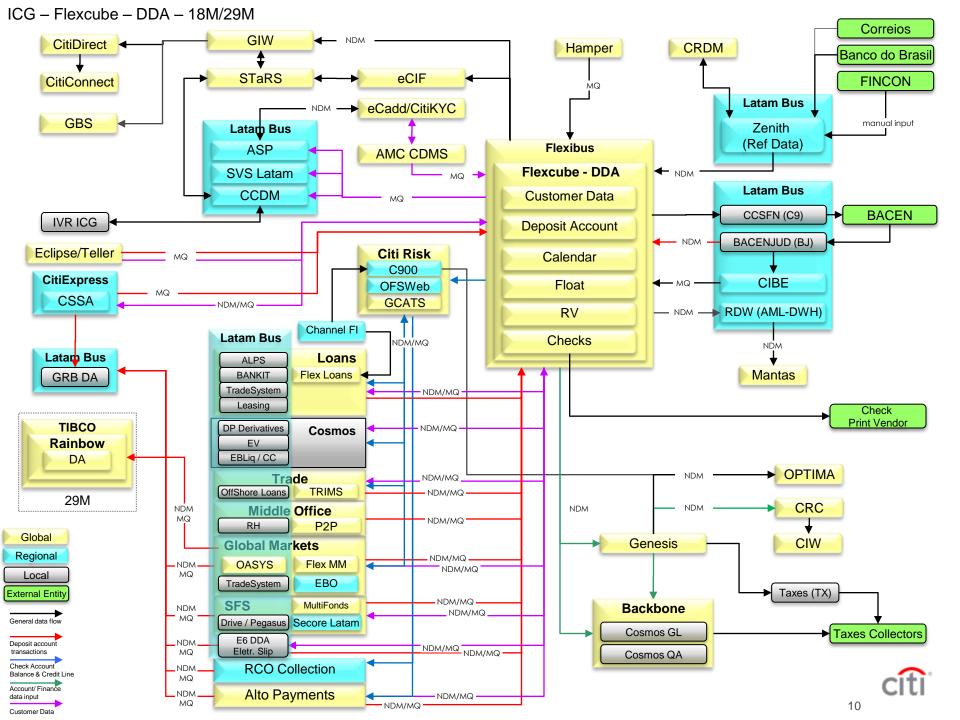
G2C Process GCG & ICG

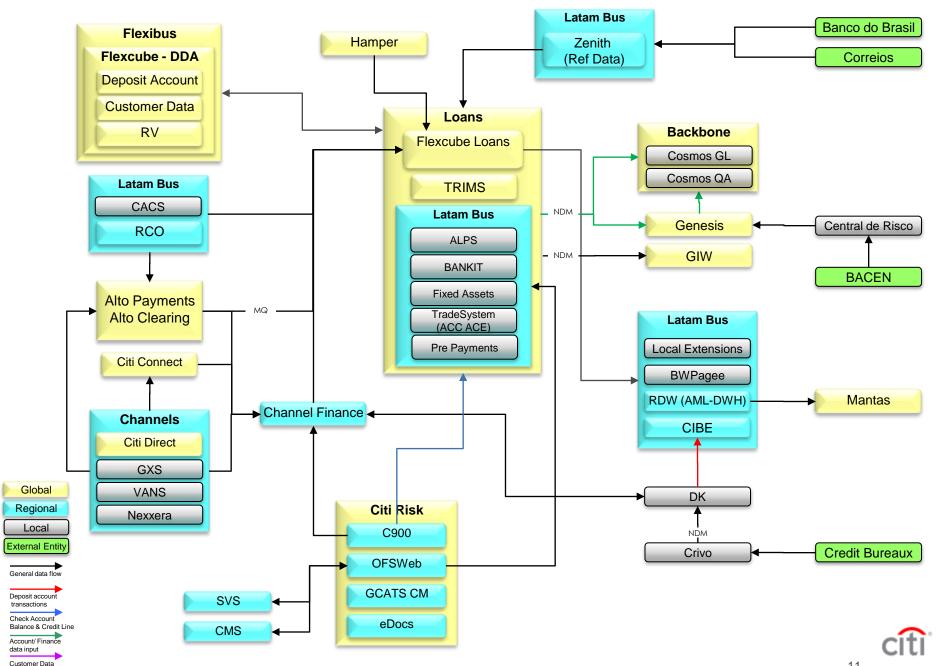


ICG – BZTE - End state diagrams

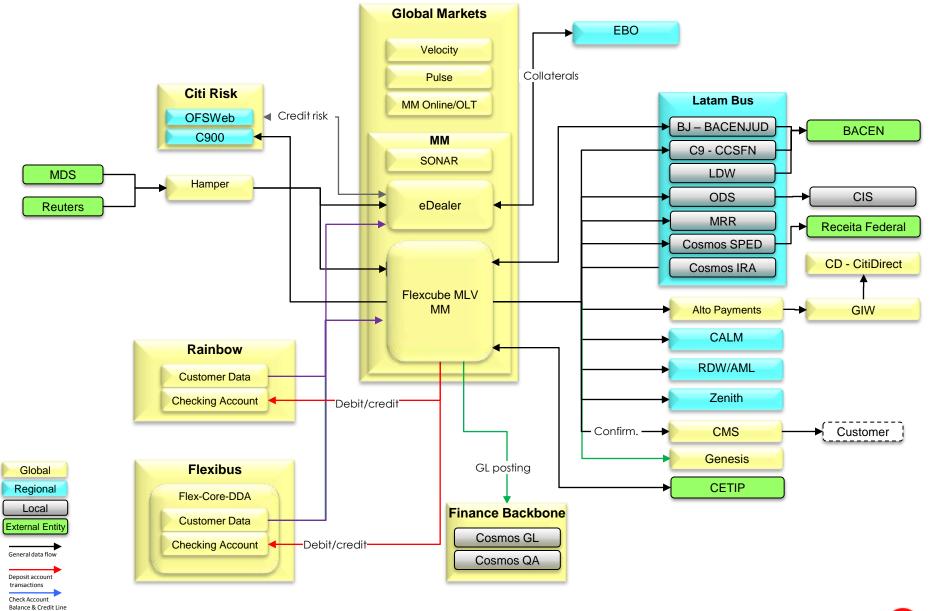
- Flexcube DDA
- Flexcube Loans
- Flexcube MM
- ALTO
- GIW
- Finance

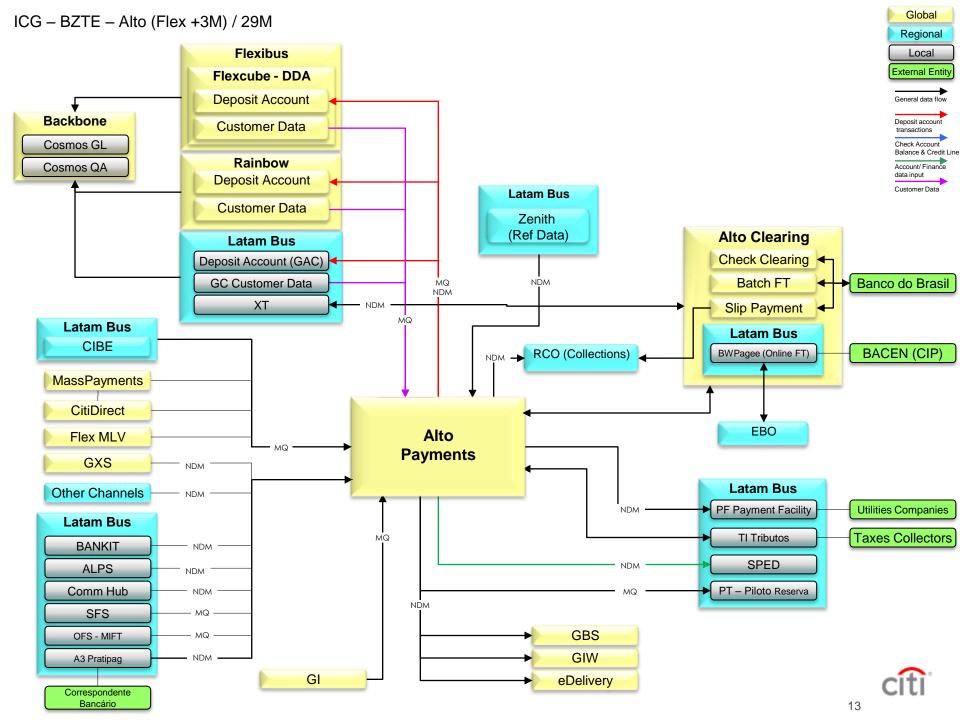


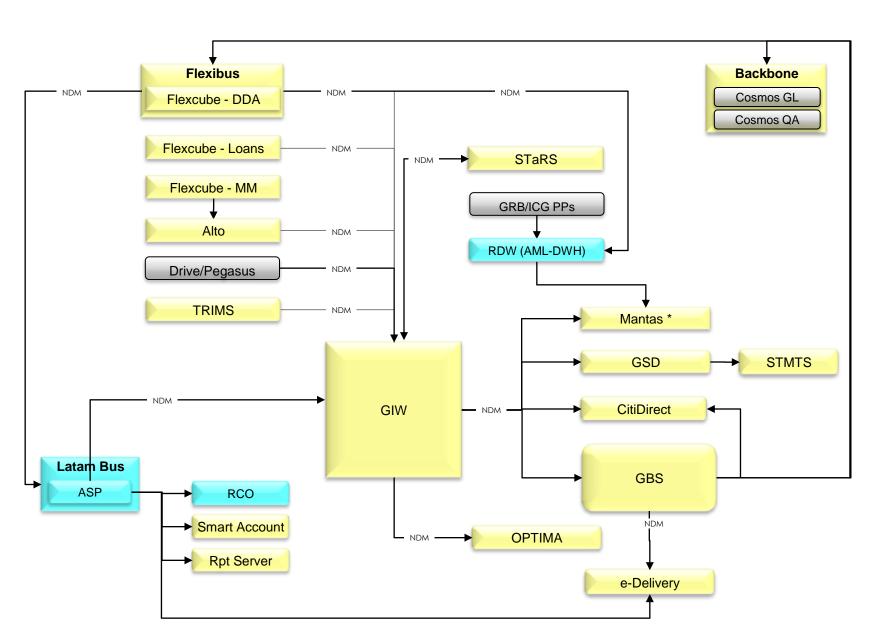


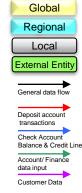


Account/ Finance data input Customer Data





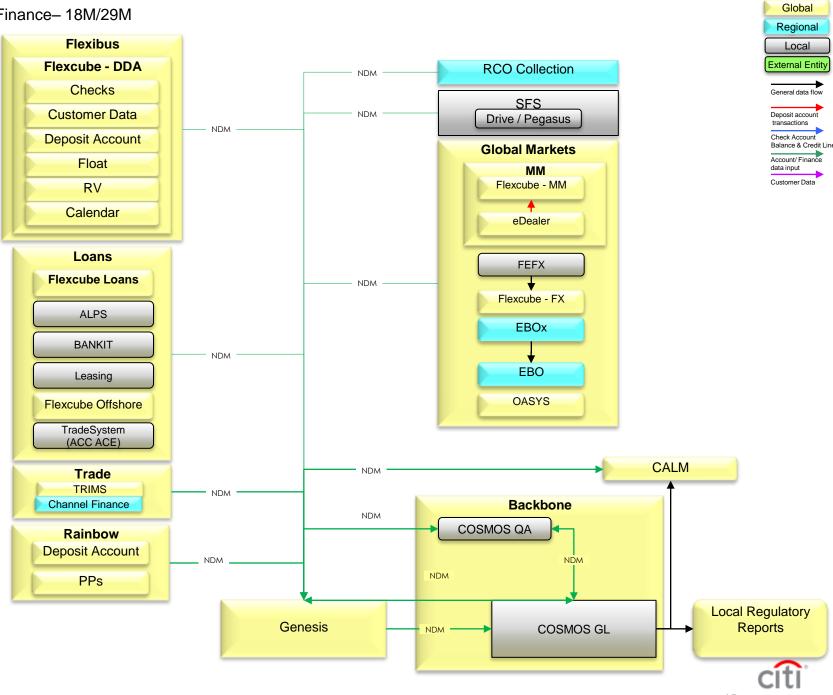




* GIW is not feeding Mantas with LATAM info.



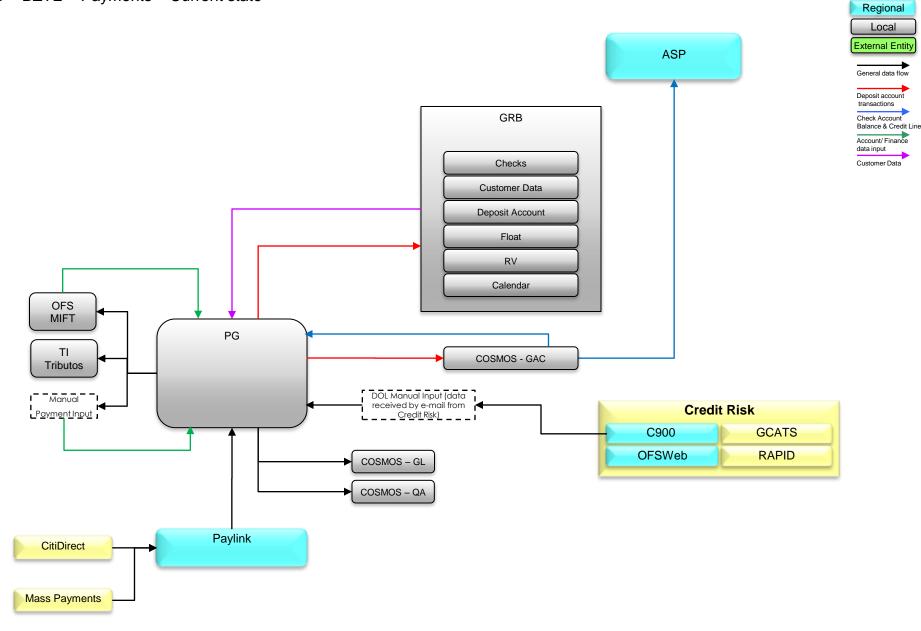
ICG - BZTE - Finance- 18M/29M



ICG - BZTE – Flexcube DDA vs ALTO implementation scenaries

- Current state of payments connectivity
- Scenario 1: ALTO before Flexcube DDA
- Scenario 2: Flexcube DDA before ALTO
- ALTO and Flexcube DDA end state



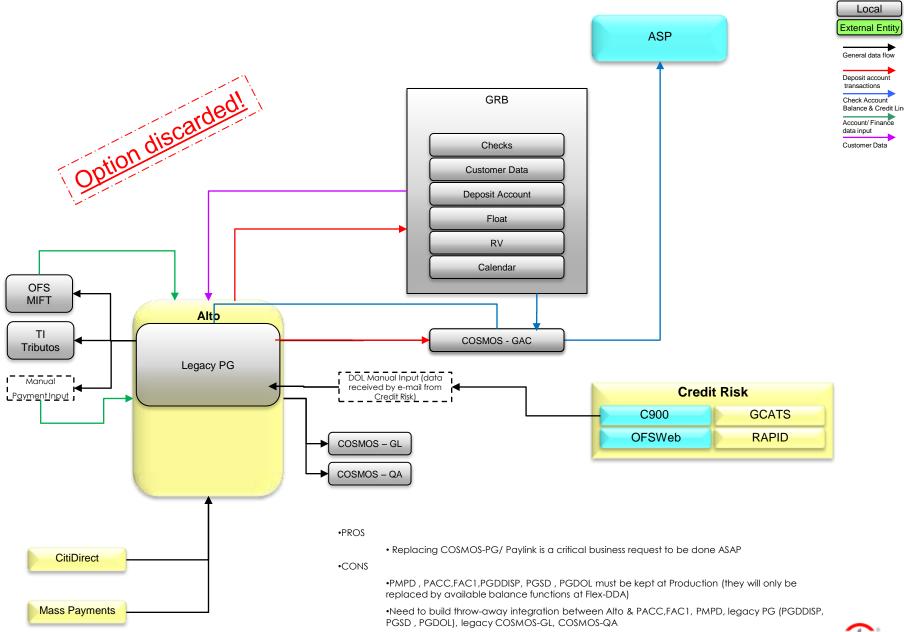




Global

Local

ICG - BZTE - Payments - ALTO before Flexcube DDA - SCENARIO 1



•OSF MIFT, TI Tributos will continue using PGSDDISP

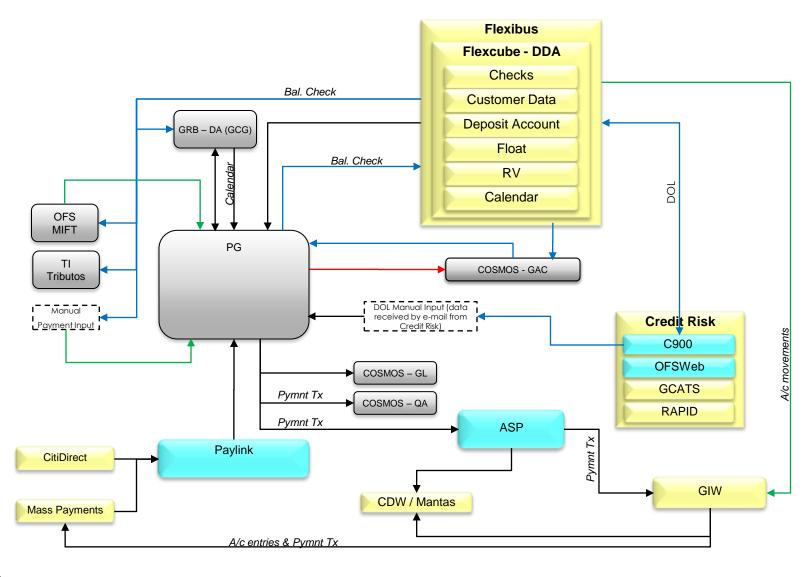
Global

Regional Local

transactions

Check Account

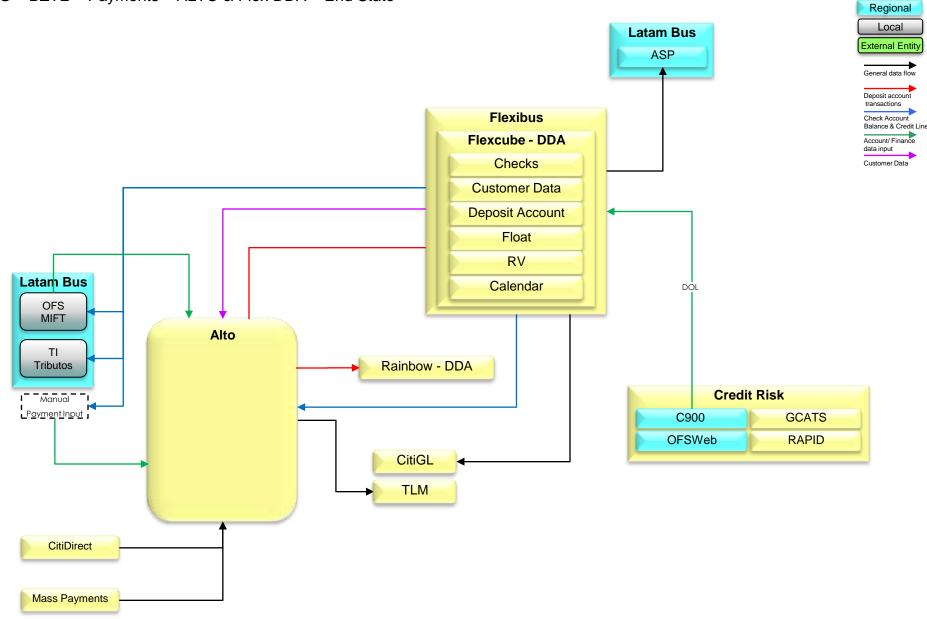
ICG – BZTE – Payments – Flexcube DDA before ALTO – <u>SCENARIO 2</u>



•PROS:

- Less through away interfaces
- •Non-COSMOS systems can use available balance provided by Flex-DDA (which it's end-state)
- •CitiGL will be on Production

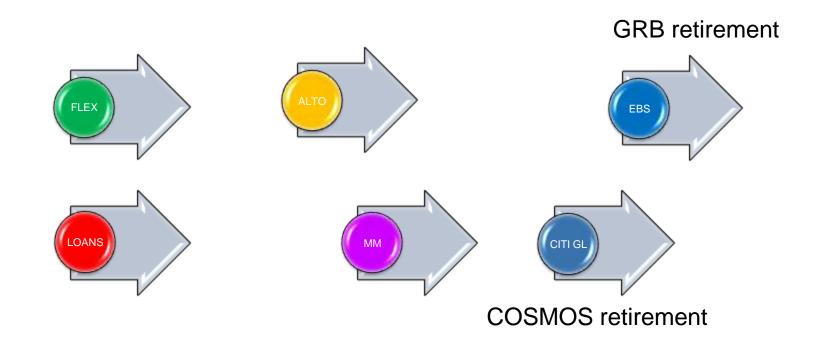
Global

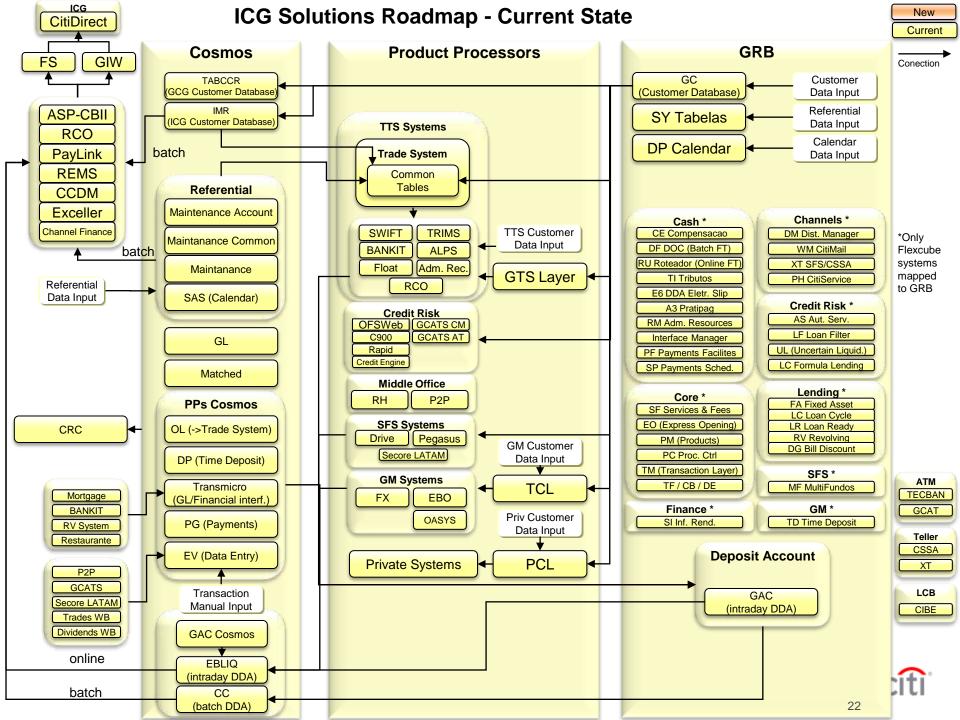


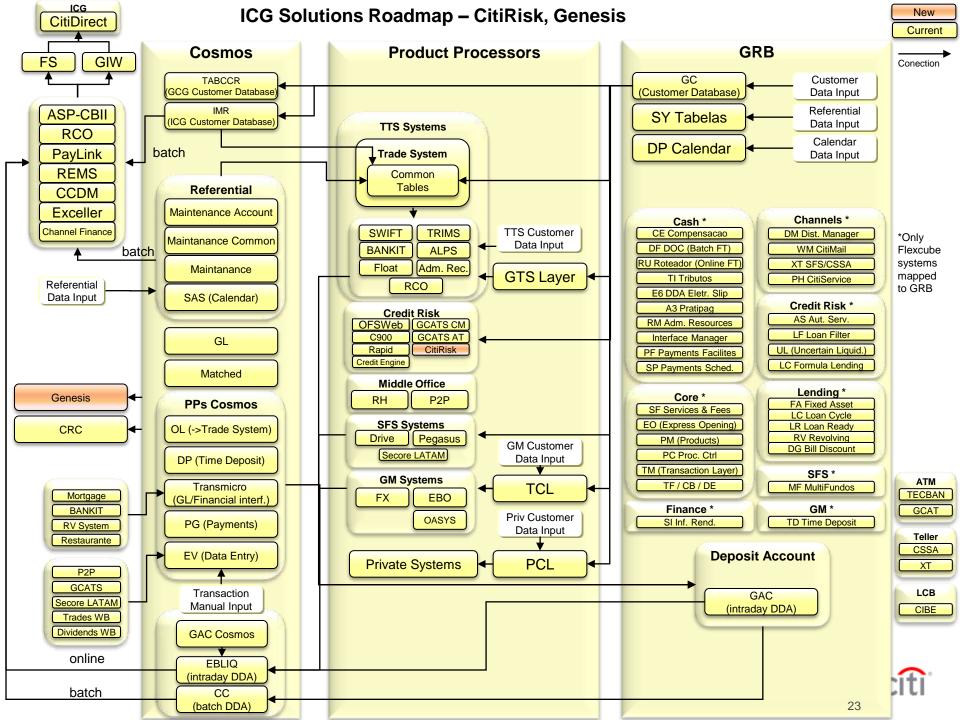
Global

BZTE – Main milestones considered in architecture roadmaps

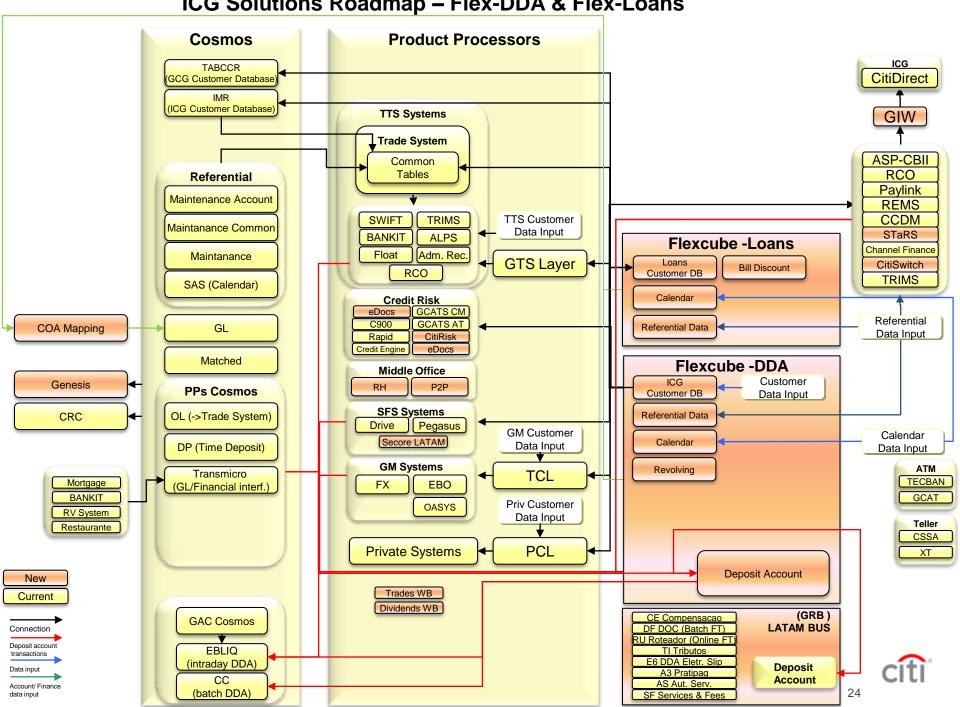
2013 2014 2015







ICG Solutions Roadmap - Flex-DDA & Flex-Loans



ICG Solutions Roadmap - Alto - Flexcube MLV Cosmos **Product Processors TABCCR** CitiDirect GCG Customer Database) Flexcube -MM (ICG Customer Database) **TTS Systems GIW** Money Market Customer DB Trade System Calendar **ASP-CBII** Common **RCO** Tables Referential Data Referential Alto Maintenance Account REMS **CCDM SWIFT TRIMS** TTS Customer Maintanance Common Data Input **STaRS BANKIT ALPS** Flexcube -Loans Channel Finance Float Adm. Rec. Maintanance **GTS Layer** Loans CitiSwitch **RCO** Customer DB **TRIMS** SAS (Calendar) Alto Clearing Calendar **Credit Risk** eDocs **GCATS CM** C900 **GCATS AT COA Mapping** Referential Data GL Rapid CitiRisk Referential Credit Engine **eDocs** Data Input Matched Flexcube -DDA **Middle Office** Customer Genesis P₂P **PPs Cosmos** Customer DB Data Input SFS Systems **CRC** OL (->Trade System) Referential Data Pegasus **GM Customer** Calendar Secore LATAM Calendar Data Input Data Input **GM Systems ATM** Revolving **Transmicro TCL** TECBAN Mortgage (GL/Financial interf.) FX **EBO** BANKIT **GCAT** Priv Customer OASYS eDealer RV System **Data Input** Teller Restaurante **CSSA Private Systems PCL** Deposit Account New Trades WB Current Dividends WB (GRB) **GAC Cosmos LATAM BUS** Connection Deposit account **EBLIQ** TI Tributos transactions E6 DDA Eletr, Slip (intraday DDA) **Deposit** Data input CC Account AS Aut. Serv. Account/ Finance (batch DDA) SF Services & Fees

ICG Solutions Roadmap - Rainbow Cosmos **Product Processors** ICG CitiDirect **TABCCR** GCG Customer Database) Flexcube -MM **GIW** (ICG Customer Database) **TTS Systems** Money Market Customer DB Trade System **GBS** Calendar **ASP-CBII** Common Tables Referential Data **RCO** Referential Alto Maintenance Account REMS **CCDM** TTS Customer **SWIFT TRIMS** Maintanance Common Data Input **STaRS BANKIT ALPS** Flexcube -Loans **Channel Finance** Float Adm. Rec. Maintanance **GTS Layer** Loans CitiSwitch **RCO** Customer DB **TRIMS** SAS (Calendar) Alto Clearing Calendar **Credit Risk** eDocs GCATS CM C900 **GCATS AT COA Mapping** Referential Data GL Rapid CitiRisk Referential Credit Engine eDocs Data Input Matched Flexcube -DDA **Middle Office** Customer Genesis P₂P **PPs Cosmos** Customer DB Data Input SFS Systems **CRC** OL (->Trade System) Referential Data Pegasus **GM Customer** Calendar Secore LATAM Calendar Data Input Data Input **GM Systems ATM** Revolving **Transmicro TCL** TECBAN Mortgage FX (GL/Financial interf.) **EBO** BANKIT GCAT Priv Customer OASYS eDealer RV System Data Input Teller Restaurante Eclipse **Private Systems PCL** Deposit Account New Trades WB Current Dividends WB (GRB) **GAC Cosmos** Rainbow Connection LATAM BUS Deposit account **EBLIQ** TI Tributos transactions E6 DDA Eletr, Slip (intraday DDA) Deposit Data input A3 Pratipag CC Account Account/ Finance (batch DDA) data input

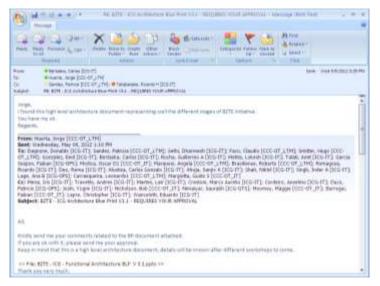
ICG Solutions Roadmap – COSMOS retirement / GRB Apps rewritten – End State **Product Processors** CitiDirect Flexcube -MM **GIW TTS Systems** Money Market Customer DB **Trade System GBS** Calendar **ASP-CBII** Common **RCO Tables** Referential Data Alto REMS **CCDM SWIFT TRIMS** TTS Customer Data Input **STaRS BANKIT ALPS** Flexcube -Loans **Channel Finance** Float Adm. Rec. **GTS Layer** Loans CitiSwitch **RCO** Customer DB **TRIMS** Alto Clearing Calendar **Credit Risk** eDocs GCATS CM C900 **GCATS AT** Referential Data Rapid CitiRisk Referential CitiGL Credit Engine eDocs Data Input Flexcube -DDA **Middle Office** Customer Genesis P2P Customer DB Data Input SFS Systems CRC Referential Data Pegasus Calendar Secore LATAM Calendar Data Input **GM Systems ATM** Revolving TECBAN **EBO** GCAT Priv Customer OASYS eDealer Data Input Teller Eclipse **Private Systems PCL** Deposit Account New Trades WB Current Dividends WB LATAM BUS/ Rainbow Connection **New Apps** Deposit account TI Tributos transactions E6 DDA Eletr. Slip Deposit Data input A3 Pratipag Account Account/ Finance

Appendix A – Data Dictionary

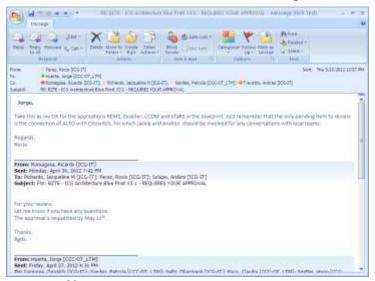
Acronym	Description	Acronym	Description
AFEWS	Advanced Fraud Early Warning Services	Genesis	Enterprise contracts, positions and balances data wharehouse.
ALPS	Assets and Liabilities Processing System	GL	Interactive Voice Response
ALTO	Low Value Clearing System	IVR	Interactive Voice Response
BACEN	Brazilian Central Bank	MM	Money Market
C9 CCSFN	Customer recorder in Brazilian Financial System	NEMS	Non-Employee Management System
CACS	Collections System	OFSWeb	Order Fullfillment System on the Web
CBOL	Citibank On Line	P2P	Procure to Pay
CDMS	Customer Directory Management System	RCO	Regional Collections
CDS	Citibank Derivatives System	REMS	Regional Electronic Messages System
CE	Electronic Clearing (Compensacao Eletronica)	SPB	Brazilian Payment System (Sistema de Pagamentos Brasileiro)
CitiGL	General Ledger	TRIMS	Trade Information Management System
COA	Chart Of Accounts	TCL	Treasury Common Layer
CRC	Citi Reporting Core		
DDA	Demand Deposit Account		
EBO /EBOX	Enhanced Back Office		
EBS	Enhanced Banking System		
EDW	Enterprise Data Warehouse		
GCATS	Global Collateral and Asset Tracking System		
GICAP	Reconciliation Utility Engine		

Appendix B – Approvals / Comments

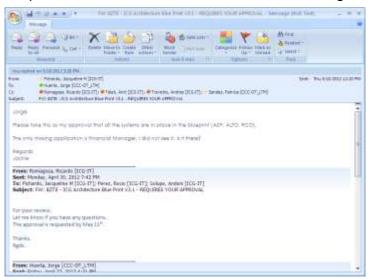
Carlos Bertaska - 5/9/2012



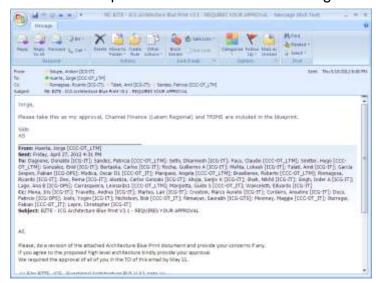
Rocio Perez on behalf of Ricardo Romagosa - 5/9/2012



Jaqueline Pichardo on behalf of Ricardo Romagosa – 5/10/2012



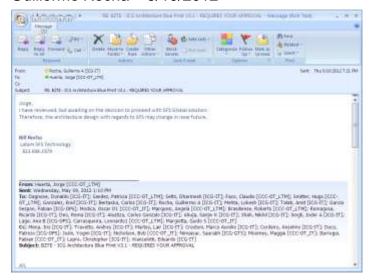
Andoni Solupe on behalf of Ricardo Romagosa - 5/10/2012



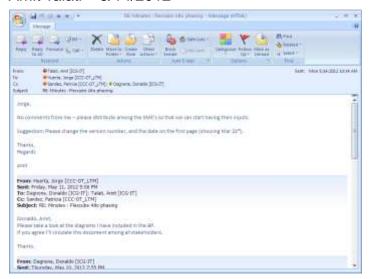


Appendix B – Approvals / Comments

Guillermo Rocha - 5/10/2012



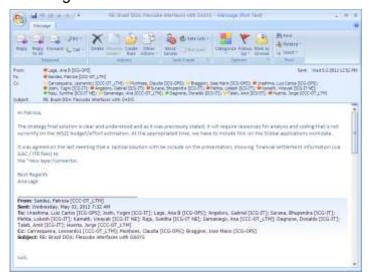
Amit Talati - 5/14/2012



Fabian Garcia Sespon – 5/11/2012



Ana Lage - 5/2/2012





Appendix B – Approvals / Comments

Enid Gonzalez - 5/24/2012

