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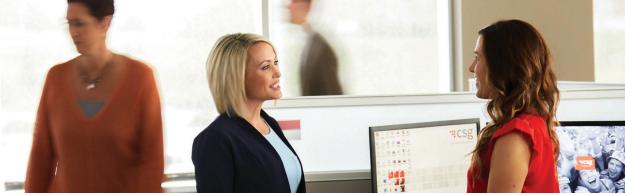
CSG Dispute and Reconciliation Management

Simplify and Automate Dispute Management and Reconciliation Processes









Effective Dispute and Reconciliation Management

Operational Efficiencies

A communication service provider (CSP) may need to send and receive hundreds, sometimes thousands of accounts in each billing cycle. Each of these accounts received needs to be captured, verified and reconciled, possibly leading to negotiations prior to any settlement taking place.

The Capture system enables users to:

- Process electronic invoices in most common file formats
- 2. Normalize data to a standard format for internal processing
- 3. Validate reference data
- 4. Handle errors and alarms

Reduce Billing Errors

Experts have estimated that an average of 7 to 15 percent of telecom invoices contain billing errors or inaccuracies. Since most CSPs process a significant number of wholesale invoices each month, they could be losing money on incorrectly billed telecommunication expenses. In fact, many businesses are still using a combination of manual review and spreadsheet-based audit tools to review their wholesale telecom expenses.

Improved Efficiencies

This type of manual solution is very inefficient as it consumes staff resources and provides very little process handling or business intelligence software capabilities. Considering that an average enterprise's expense invoice from a partner carrier can contain anywhere from a hundred to several thousand pages of detail, it is easy to understand the difficulties and effort involved in a manual auditing of these carrier invoices.

Integrated Billing Management

Dispute and Reconciliation Management can provide relevant information to CSG's Financial Manager solution for invoicing and ERP mechanisms. Standard invoicing and ERP processes now optionally include a validation phase where the data is passed through the Dispute and Reconciliation Management solution for authorization. This enables different user roles to better control the processing of invoice and payment information in both invoicing and ERP systems alike. If required, this can add a further level of control on the processes in place to handle payment of invoices.



Workflow and Challenge Management

Dispute tracking is achieved with a workflow that is configured according to specific customer requirements. The solution supports event record matching for the lines with discrepancies. Event audit is achieved by a dedicated, integrated, high performance matching tool.

Reporting and Monitoring

Apart from the standard reporting solution offered as part of the CSG Settlement solutions, the Dispute Management workflow tool provides a comprehensive dispute monitoring toolkit through grids, dashboards and workflow history reports.

Statement Direction: RECEIVE, Currency: USD														
Update Summary	Manage Dispute	View Graph	Agreement	Billing Period	System Status	Amount	Partner Amount	Proposal Amount	Proposal Amount (Detail)	Agreed Amount	User Status	Reconciled Records (Detail)	Disputed Records (Detail)	Tot vs Det
	*		Franchise with Orange World	01-JUL-2017	DISPUTE	150.56	87.73	87.73	80.84	87.73	DISPUTE	2	11	WARNIN
<i>/</i> *	✓ *		Franchise with Orange World	01-JUN-2017	DISPUTE	722.2	470.09	470.09	18.87	470.09	DISPUTE	1	43	WARNIN
	Z.		Franchise with Orange World	01-MAY-2017	RECONCILED	437.48	479.19	479.19	455.58	479.19	RECONCILED	13	6	WARNIN
	*		FRATT-DEUTR-IRONMAN	01-APR-2017	DISPUTE	261.42	130.75	261.42	261.42	261.42	DISPUTE	0	20	ОК
						1571.66	1167.76	1298.43	816.71	1298.43				
Statement Direction: SEND, Currency: USD														
Update Summary	Manage Dispute	View Graph	Agreement	Billing Period	System Status	Amount	Partner Amount	Proposal Amount	Proposal Amount (Detail)	Agreed Amount	User Status	Reconciled Records (Detail)	Disputed Records (Detail)	Tot vs Det
1	1		Franchise with Orange World	01-JUL-2017	DISPUTE	1078.28	578.54	578.54	561.57	578.54	DISPUTE	1	9	WARNIN
/	1		Franchise with Orange World	01-JUN-2017	DISPUTE	2448.88	802.57	802.57	33.21	802.57	DISPUTE	0	46	WARNIN
/			Franchise with Orange World	01-MAY-2017	DISPUTE	1961.53	799.95	799.95	799.95		DISPUTE	4	23	OK

Modify Dispute	Daily Summary	View History	View Graph	EDR Extract Request	Traffic Period	Reconciliation Method	Invoice No	Reconciliation Key	Amount	Partner Amount	Difference Amount ABS	Proposal Amount	System Status	User Status	User Comments	Current Stage Status
Ø	Q			Ø	01-MAY-2017	PARTNER	4535J58	Voice Special offer 1	8,68	8.68	0	8.68	RECONCILED	RECONCILED	System reconciled	OPEN
Ø	Q			Ø	01-MAY-2017	PARTNER	4535J58	Voice Special offer 2	43.16	43.16	0	43.16	RECONCILED	RECONCILED	System reconciled	OPEN
Ø	Q			Ø	01-MAY-2017	PARTNER	4535J58	Russia Mobile Rostel	19.89	25	5.11	25	RECONCILED	RECONCILED	System reconciled	OPEN
⊠ *	•,			M'	01-MAY-2017	MINIMUM	4535J58	Poland Fixed POLTEL Zone 1	.98	2	1.02	.98	DISPUTE	DISPUTE	-	OPEN
Ø	Q			Ø	01-MAY-2017	PARTNER	4535J58	Poland Mobile P4 Peak	7.35	12	4.65	12	RECONCILED	RECONCILED	System reconciled	OPEN
⊠	•			M'	01-MAY-2017	MINIMUM	4535J58	Poland Fixed POLTEL Zone 6	.98	1.95	.97	.98	DISPUTE	DISPUTE		OPEN



EDR Matching

The EDR Matching engine provides self-service capability for business users.

When part of a dispute process, DRM will let the user to request EDR extract, and trigger matching of the discrepant items marked by the user. The necessary parameters, such as which data to extract from the CSG Settlement solution and expect from the partner, are provided by DRM

to the matching engine, using the data from the disputed invoice lines. The matching rules can be configured by users, who will be able to change the standard configuration of the matching to support the requirements for event matching.



Match Rule Name	Match Status	Total Franchise Count	Total Franchise Duration	Total Partner Count	Total Partner Duration
-	INITIAL VALUES	117	963256	112	918243
-	REJECTED	0	0	1	9005
DRD	BEFORE PROCESS	117	963256	110	900232
DRD	DUPLICATED	72	579933	65	516903
DRD	UNMATCHED	45	383323	45	383329
BASD Offset [5,0]	BEFORE PROCESS	45	383323	45	383329
BASD Offset [5,0]	MATCHED	43	365308	43	365308





Dispute Scenario Support

Post Invoice Received

In this dispute scenario, the CSP will reconcile and dispute an invoice after it is received from a partner. The dispute management process offered by CSG will be responsible for loading, mapping and validating the received invoice, loading the CSP's Interconnect data relating to this invoice, and identifying possible dispute areas and providing an initial proposal.

Post Invoice Send

In the post invoice send scenario, the CSP will send the invoice and the partner will provide the partner's expected invoice. The dispute management process will then load CSP's and partner information and reconcile identifying areas to dispute data received.

Pre-Invoice Received

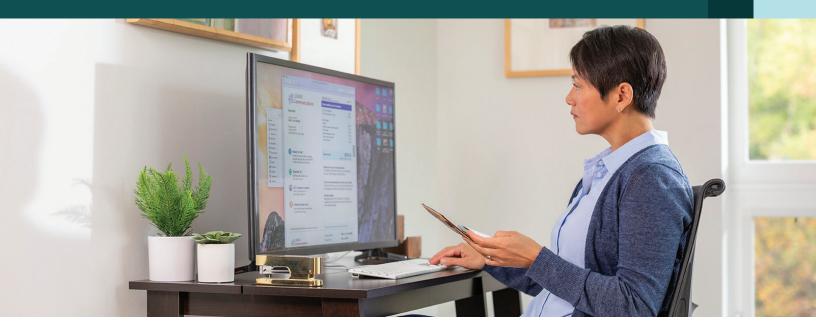
There are instances when disputes are finalized prior to the invoicing stage. In these situations, the dispute management process is able to load traffic/financial data exchanges between CSPs and enable comparisons of data, and finalization of problem areas before an invoice is received.

Pre-Invoice Send

Similar to the pre-invoice received, the pre-invoice send option allows CSPs to exchange traffic and financial data with partners in a controlled manner prior to sending out an invoice. partner information and reconcile identifying areas to dispute data received.

With dispute scenario support, one or more scenarios can be handled for the same agreement.





Statement Management

Easing The Administrative Burden

One of the challenges of a large organization is the volume of statements and data that needs to be dealt with each month. Each partner may provide statement data in a different format, and at different levels of aggregation. The reconciliation and dispute processes require the data to be in a standard format and it is therefore critical to employ a system that is able to cater for this.

Statement management, through custom parsing, is able to manage multiple document formats. The parsing process includes an optional data validation and enrichment process that can not only confirm the correctness of the document content (e.g. service, carrier and destination information) but also perform a mapping of the data in cases where certain entities are referenced by different codes in the Interconnect system and the invoice.

Enrich, Map and Validate Data

Statement data can be enriched with captured properties, mapped to other data entities as well as validated against reference data in the system.

Users are able to process exceptions caused by invalid enrichment logic, mapping or validations and update statement data, or mappings, online.

Process Multiple Formats

The statement loading tool is able to parse and interpret a number of different formats of documents. While the initial process in the document handling may be to scan the physical document, once scanned, the documents will be parsed by the necessary parser.

Formats supported by the custom parsers include document types such as Microsoft Excel, CSV and fixed length text.



The CSG Settlement solution is by far the world's most widely used solution for billing and settlement between communication service providers (CSPs).

By including an integrated Dispute and Reconciliation Management solution with the CSG Settlement solution, CSG is adding value beyond CDR-to-bill management capabilities, through to the dispute process itself.

Dispute and Reconciliation Management provides tools to handle the comparison, proposal and dispute process, reducing or eliminating the use of spreadsheets and manual checking to verify and control disputes that are worth millions of dollars.

Customers can benefit by reducing the cash flow impact that can be attributed to human errors and lack of supporting tools.

CSG Digital Wholesale offerings include:

- CSG Interconnect: Partner Management and inter-operator billing for national and international, mobile and fixed line for voice, data and IP services
- CSG Route: trading, automated routing and deal management for international voice and data services
- CSG Assure: Service assurance and testing for voice, SMS, data, roaming and contact centers.
- CSG Detect: Detection and blocking of telecoms fraud schemes such as illegal bypass and international wholesale fraud using interactive dashboards combined with Assure testing functionality.
- CSG Roam: Management and settlements for TAP and BCE roaming.
- **CSG Exchange:** Automated management and processing of contractual information and data that operator receives from their partners.

The CSG
Settlement
solution is by
far the world's
most widely
used solution
for billing and
settlement
between
communication
service providers
(CSPs).

ABOUT CSG

CSG empowers companies to build unforgettable experiences, making it easier for people and businesses to connect with, use and pay for the services they value most. Our customer experience, billing and payments solutions help companies of any size make money and make a difference. With our SaaS solutions, company leaders can take control of their future, and tap into guidance along the way from our more than 5k-strong experienced global team.

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