

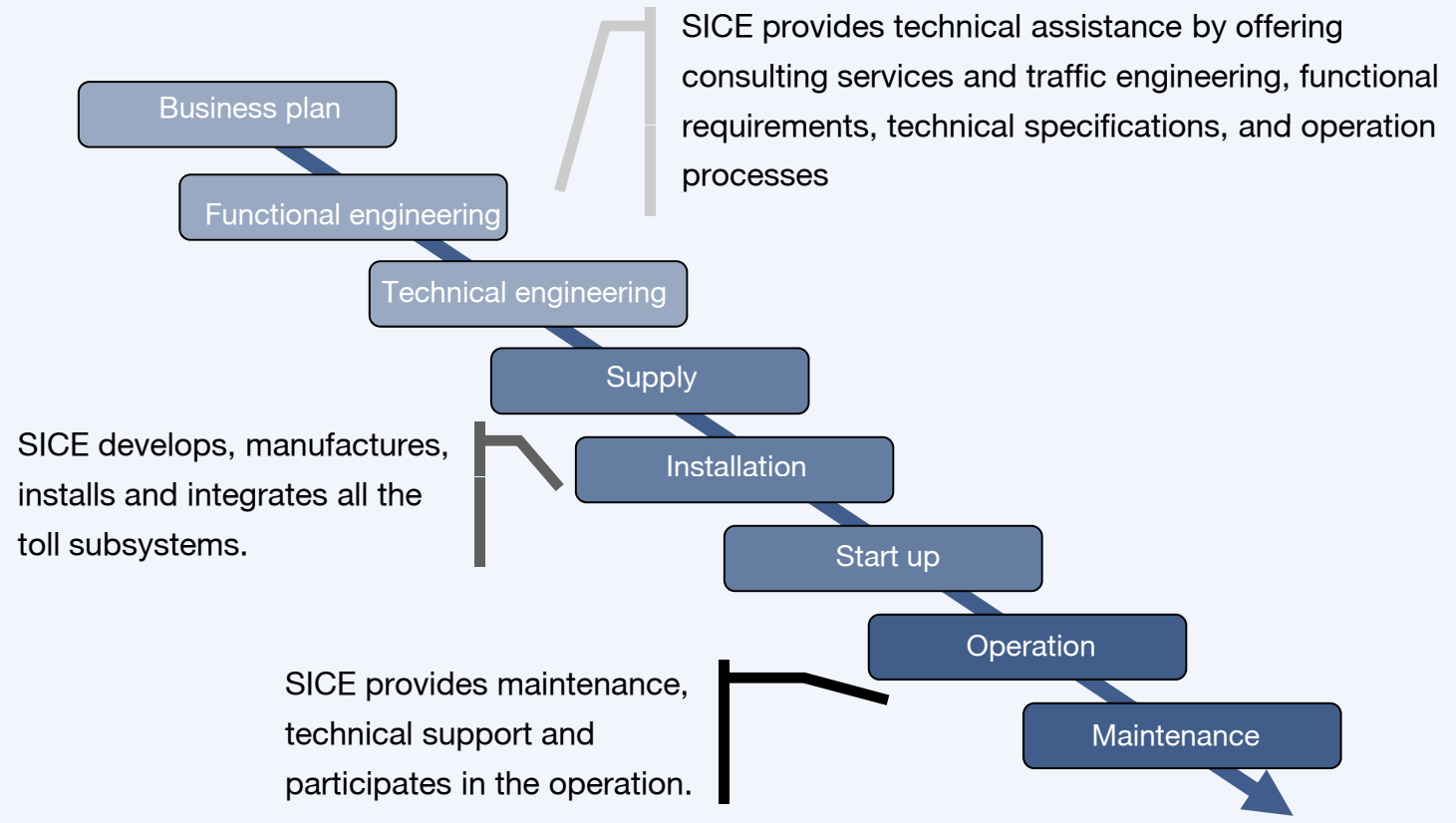
Toll systems



Cutting edge of technology at your service



We have solutions for any type of toll system



Standard toll - Lane and station level

The lanes developed by SICE are based on standard hardware and software applications:

- Manual, automatic, dynamic lanes and their combinations.
- Open, closed and open-closed toll, including all existing methods of payment.
- Pre and post classification, video-enforcement, license plate number recognition, ...



Screenshot of the SICE toll console interface. The interface displays the following information:

- Location:** Sidi Allal El Bahraoui, Voie: X99
- Status:** Ouverte Manuel
- Transaction ID:** SICE TEST 01, 000001
- Date and Time:** 06/04/11, 12:20:17
- Transaction Véhicules:** 164
- Transaction Véhicules:** 1
- Plaque voie:** (Blank)
- Plaque ticket:** (Blank)
- Gare entrée:** 215
- Tarif:** 1,10 DH
- Reste à payer:** 1,10 DH
- Versé:** 3
- A rendre:** 3
- Guercif:** 3
- Autres Opérations:**
 - 1 - Exonéré papier
 - 2 - Entrez Abonnement à Décómpse D'argent
 - 3 - Entrez Fréquence de Passage
 - 4 - Entrez Abonnement Administratif
 - 5 - Entrez Ticket Démagnétisés
- Entrez le code:** (Blank)
- Paielement de véhicule:** 12:27:49
- Insérez le ticket d'entrée:** 12:26:56
- Date and Time:** 06/04/11, 12:28:22

Standard toll - Lane and Station level

SICE has developed the drivers and integrated the highest number of microwave products for the dynamic toll system, 0.9, 2.4 and 5.8 Ghz, GSSA1, ISO 15509:

- AMTECH (currently known as TRANSCORE)
- COMBITECH (currently known as KAPSCH)
- MARK-IV
- Q-FREE
- CONFIDENT



Standard toll - Operation

SICE offers its highly proven experience in operation throughout the different projects and quickly adapts to the needs of the contractor in toll billing management:

- Generation of fares by timetable and travel sections.
- Remote control of the lane and station elements.
- Validation and consolidation
- Operation reports issue configurable
- Maintenance management

Incidents Client - Hammanskraal <@hamman-rs>

Incidents Client Lane : ALL LANES

Lane	Date	Workshift	Block	Incidence	Description	Ack	Edit	Comment
8101	2007/11/13 10:22:47	81010001	8	8	Pure violation	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 10:13:30	91083554	7	2	Lane cash limit	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 10:10:11	91083554	6	2	Lane cash limit	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 10:08:24	91083554	6	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 10:06:22	91083554	5	2	Lane cash limit	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:59:59	91083554	4	2	Lane cash limit	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:53:22	91083554	4	8	Pure violation	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:49:29	91083554	3	2	Lane cash limit	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:42:56	91083554	2	2	Lane cash limit	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:40:16	91083554	2	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:38:15	91083554	1	2	Lane cash limit	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:33:32	91083554	1	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:30:37	91083554	0	2	Lane cash limit	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:26:46	91083554	0	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:25:40	91083554	0	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:24:49	91083554	0	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:18:58	91083554	0	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:17:36	91083554	0	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/13 09:13:47	91083554	0	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/12 16:48:18	91083554	16	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/12 16:44:25	91083554	15	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/12 16:43:44	91083554	15	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	2007/11/12 16:29:11	91083543	12	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	
8101	>2007/11/12 16:21:37	91083543	11	4	Robot in green too much time	<input type="checkbox"/>	<input type="checkbox"/>	

Lane : ALL Order by : DATE Refresh screen when new incidences X Close

Standard toll - Operation

SICE develops, integrates, coordinates and implements the following solutions:

- Client database
- Commercial strategies
- Billing
- Stock management
- Report generation
- Billing and defaulters management
- Issues different methods of payment (TAGs, cards, ...)
- Customer Relationship Management (CRM), call center, contact center



Shadow toll

SICE has executed 90 % of the projects of this type for systems that are currently operating in Spain, Portugal and the United Kingdom:

- Hardware equipment developed by SICE for these projects
- Software developed to count, classify, store the transits and check the accuracy of the measurements
- Consulting and centralized systems for the checking and auditory procedures.



Verificação PM0BE1161A

	C	D	E	F	G	H	I	J
Via 4	5	53	10	3	0	2	0	0
Via 3	2	17	0	0	0	0	0	0
Total	7	70	10	3	0	2	0	0

Ponto de medida

Data/Hora inicio
24/07/2002 18:10:00

Data/Hora actual
24/07/2002 18:08:31

Data/Hora fim
24/07/2002 18:15:00

Descrição

PK Longitude
93,9 0

Amostra Ligeiros Amostra Pesados
200 100

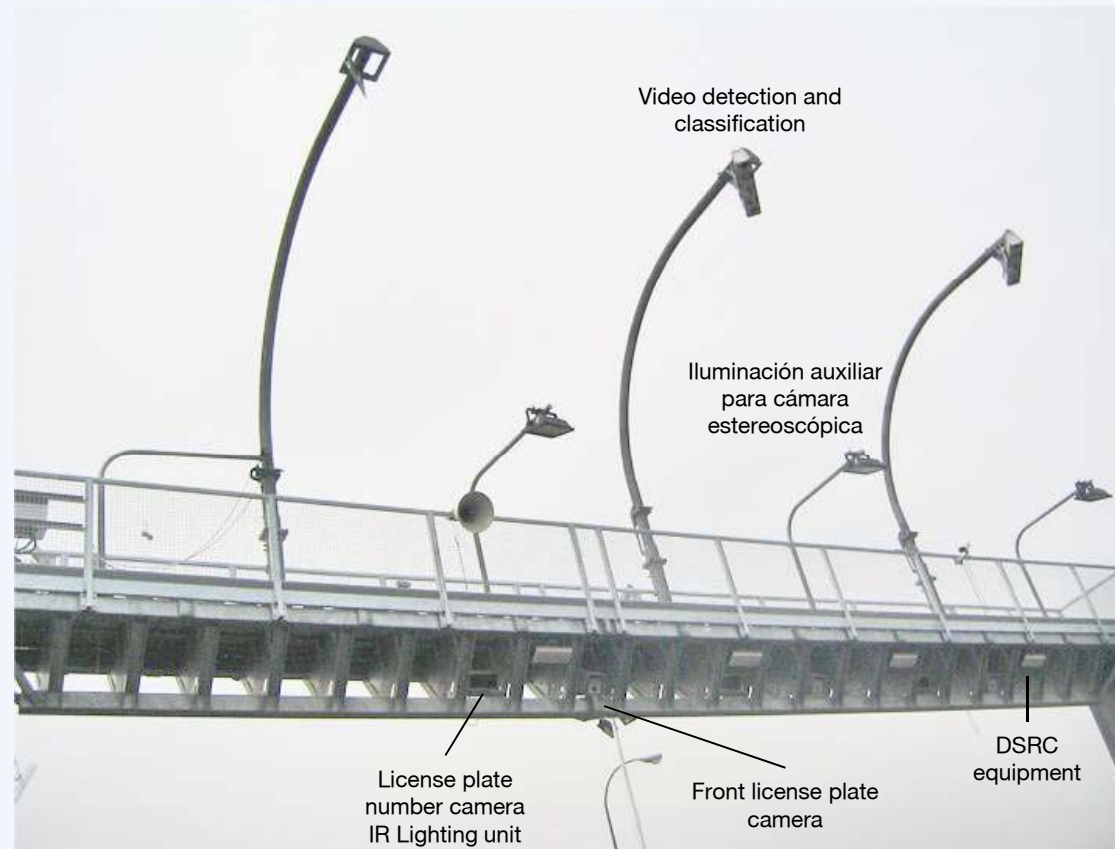
015 01hao 3:08:50 18-07-03

Fechar



Free-Flow

First Spanish company to develop Free-Flow management software, integrating the traffic control system.



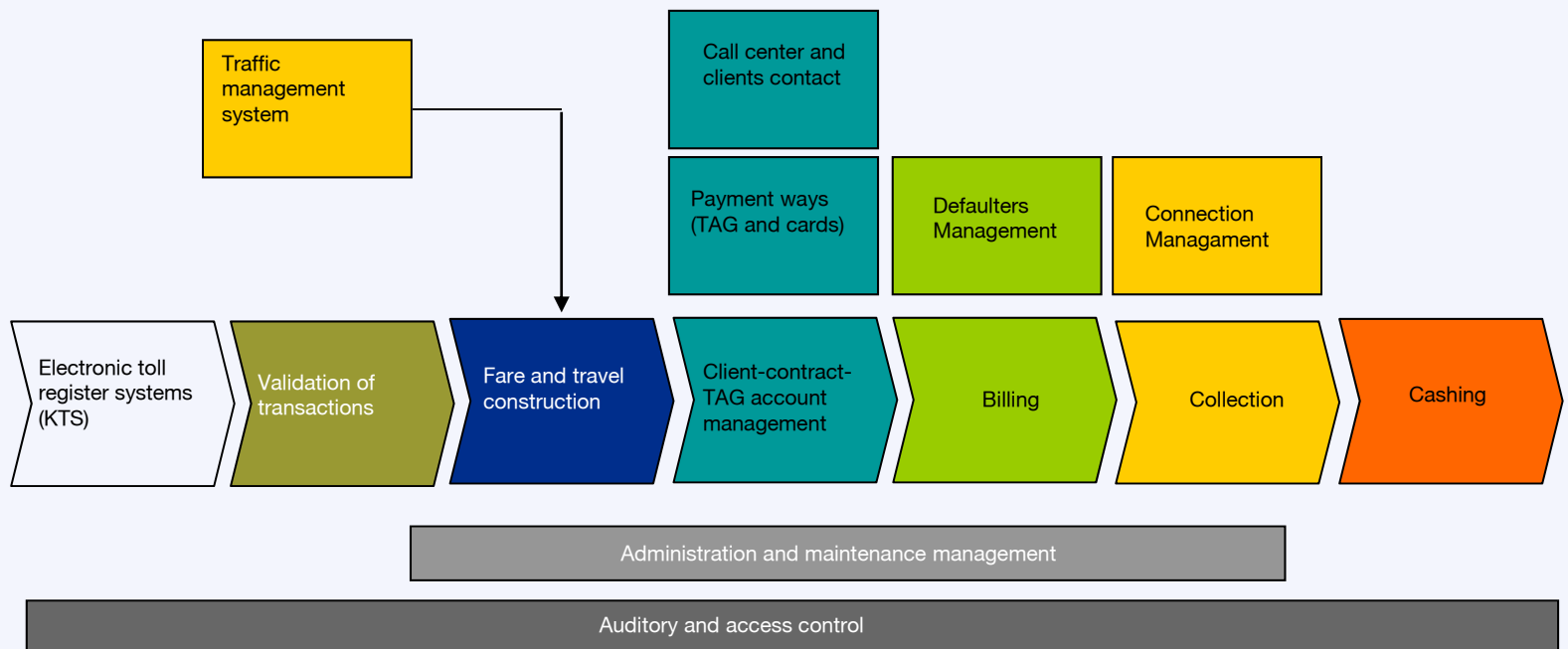
Free-Flow

Toll Operation System

- Software specifically designed according to business plan of the contractor/ system operator.

Service to the client

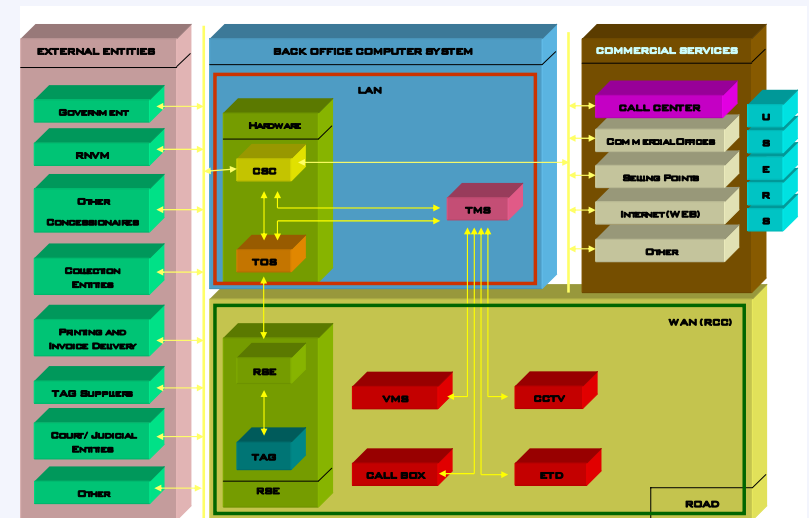
- System based on the use of a standard software modular product with long-term proven success (for example MvSAP).



Free-Flow

Specific functions for Free-Flow toll systems:

- Image processing.
- Casual/ traffic violators user management.
- Interoperability with other toll systems.
- TAG life cycle management, etc.
- Integration of counting procedures, auditing and data storage.
- Application of better practices in the account management processes, bill and/ or account state massive sending.
- Contact channels with clients totally integrated (SMS, Interactive Voice Response (IVR), Call Centre).



Standard toll - Origin

- Autopistas del Mare Nostrum S.A. Development of customized technology and training for a group within SICE.
- AUCAT, toll system successfully opened in Catalonia for the Olympic Games.
- Teodoro Moscoso Bridge (Puerto Rico), IBTTA award.
- Autopistas del Sol (Buenos Aires), first massive ETC experience.
- Fredericton-Moncton (Canada). The first experience with operation and the first one in half Free-Flow operation.
- BPPC (South Africa). First GSSA1 system installed in South Africa.



More than 1,000 tolling lanes installed in 20 years of activity in this market. We have installed standard tolling systems on all 5 continents.

Standard toll - International references

- Autopistas del Sol (Argentina)
- AUFE (Argentina)
- AUSA (Argentina)
- SEMACAR (Argentina)
- Servicios Viales (Argentina)
- Triangulo do Sol (Brasil)
- Bogota - Villavicencio (Colombia)
- COMMSA (Colombia)
- Wackenhut (Colombia).
- Teodoro Moscoso Bridge (Puerto Rico)
- DAYCO (Venezuela).
- Fredericton-Moncton (Canada)
- BPCC (South Africa)
- Central Greece
- ADM toll system (Morrocco)



Standard toll - Spanish references

- Aucat
- Autopista Mare Nostrum Tarragona - Alicante
- Autopista Mare Nostrum Sevilla - Cadiz
- Iberpistas
- León - Astorga
- León - Campomanes
- Henarsa - Radial 2
- AP8 - AP1



Shadow toll - Classification mode

Controlled kilometers 506 km
 Installed measurement points 102

- A1M/ A417-419 (UK): first shadow toll contracts.
- A-13 (UK): Urban highway with traffic lights.
- Murcia-Caravaca: first experience in Spain.
- M-45: 3 contractors with two control centres.
- Euroscut and Beira Interior (Portugal): highly complex project dealing with traffic classification (8 categories).
- Autovía de los Viñedos. Consuegra Toledo section.



Shadow toll - A 13 (UK) Availability mode

New billing concept

- Lane Availability: payments to the concessionaires are based on a traffic flow (availability) free of obstacles. This is checked through photos taken by cameras covering 100% of the freeway transit area.

Cameras installed

181

Images (weekly)

7,000,000



Free-Flow toll - Autopista Central and Vespucio Norte-Express (Santiago de Chile).

- First urban highway in Chile
- GSSA1 antennas in gantries, classification and license plate number recognition systems.
- Communications and traffic management system.
- Tolling and traffic centralized system, ERP (SAP) and SSC
- Interoperability among the four contractors



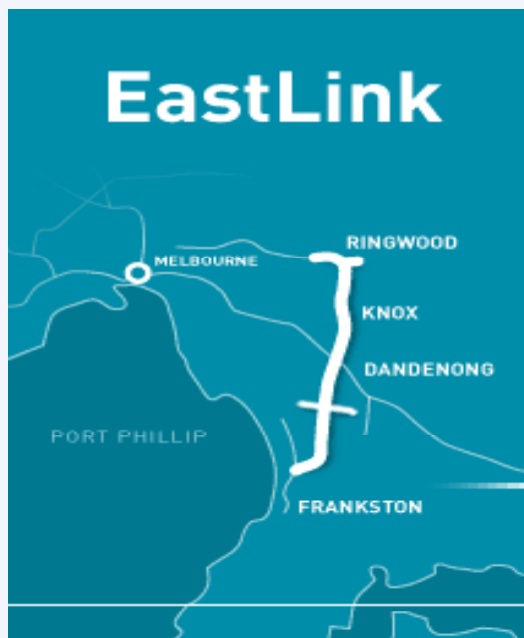
Design parameters

- Maximum speed: 160 Kph
- 2,500 vehicles/hr/lane
- 1,000,000 client accounts
- 1,400,000 transactions/ day
- Image downloading: 1 image/sec.



Free-Flow toll - Mitcham-Frankston Freeway (Melbourne)

- The largest Melbourne urban highway open to traffic (40 km).
- GSSA1 antennas in gantries, classification and number plate recognition systems.
- Compatible systems with present contractors.
- Centralized tolling system ERP (SAP) and SSC.



Design parameters

- 600,000 client accounts
- Interoperable system: 4.5 minutes/ TAGs
- 6,000,000 transactions/day
- 500 concurrent users (Internet)
- 230 workstations

