



Virtual Citizens Attention Service

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THE NEED...

Yet another fancy ict tool?



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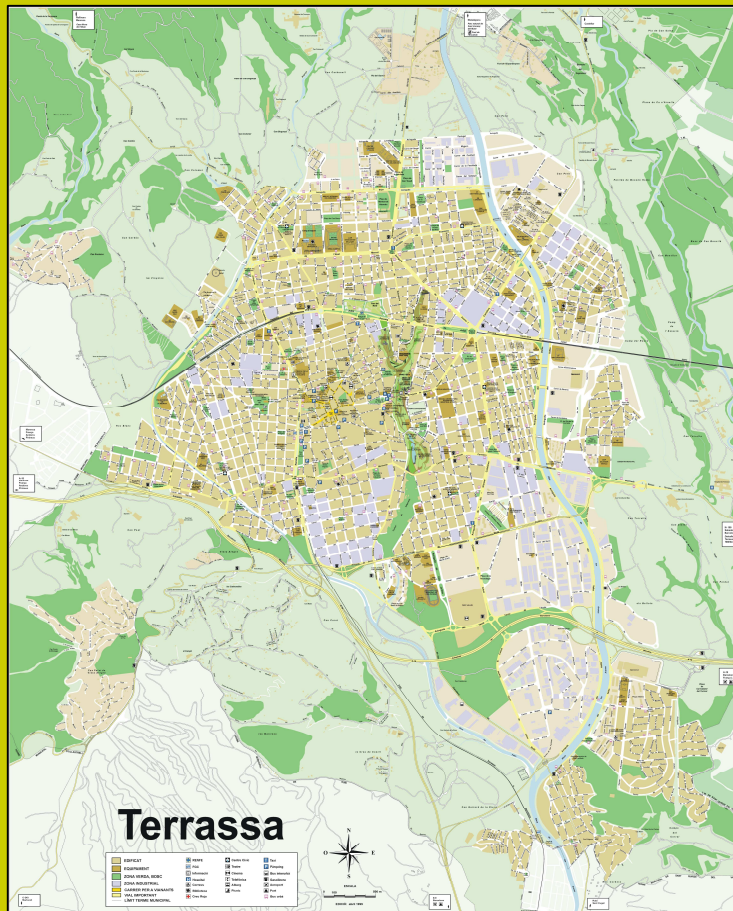


We developed iSAC because:

- Terrassa has a good Citizens Inf. & Attention Service - SAC.
- It is overloaded (400.000 calls a year, 77% on city directory)
- With the new channel we can serve more people - 24x7- at almost the same cost
- Main technology already exists, the need is for transference and innovation projects
- New PA research was on the way at the university
- The university team had past successful experiences in local govt. and SMEs in Girona (Triple Helix)

Terrassa

The city today



- 202.000 inhabitants
- 7.000 Ha mun. land
- 2.600 Ha urban land
- 253 million € budget
- 123.000 IBI units
- 40.000 items city DB
- SAC from 1992



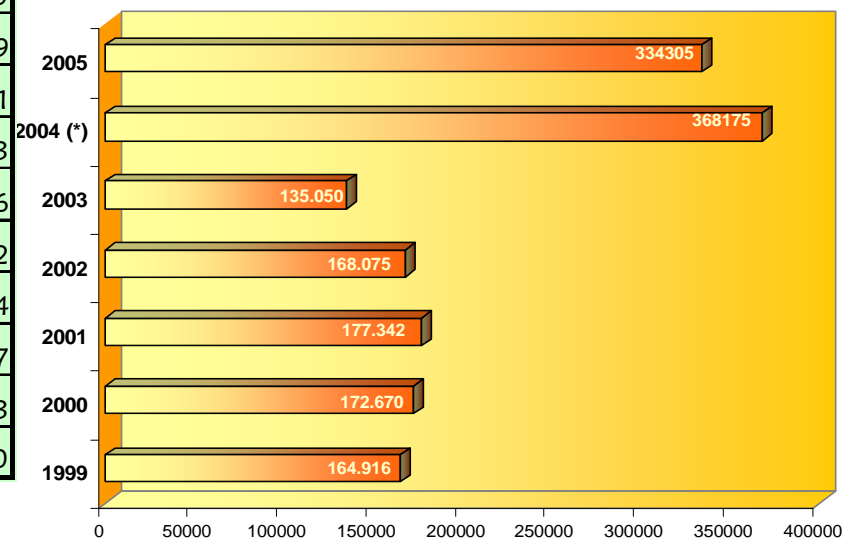
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SAC

Citizens Information & Attention Service

Total calls 2005	331.799
Type of calls	Percentatge
Commercial activities	1,03
Public services directory	2,75
Calendar of events in the city	0,18
Info on procedures in public agencies	0,51
Info on municipal procedures	4,98
City directions	0,11
Public hiring process	0,10
City gov. providers management	1,69
Calls from outside of the city	3,81
Service times, e-mail addresses, websites (directory)	1,43
Demmand of service lists	0,06
Used fournitures to be piked up at home	0,32
Public Internet Access Points reservations	0,04
Telephone - fax directory	77,57
Traffic and transportation	0,63
Completion of Municipal proceduresby phopne	4,80



The University of Girona



The Triple Helix model

**Public
Administration**

University

**PA
Innovation
& Research
Center**

Industry



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The Consortia

- The University of Girona – Agents Research Lab
- The City of Terrassa - local government
- The AOC Consortia
(The Catalan Public Administration Consortia for eGovernment)



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Timing

FASE 1

OSS QA search

Nat lang. sol

Semantics (local
& admin)

Citizens' K DB
integration

Catalan lang.

2006

FASE 2

iSAC basic tool
pack (product)

2 pilots

Spanish version

iSAC+AOC web
indexing

2007

FASE 3

Multimodal
Multilanguage

Synt Image

iSAIAS
(iSAC internal
and interadmin.)

WikiFAQ

2008

We are here now -June 07



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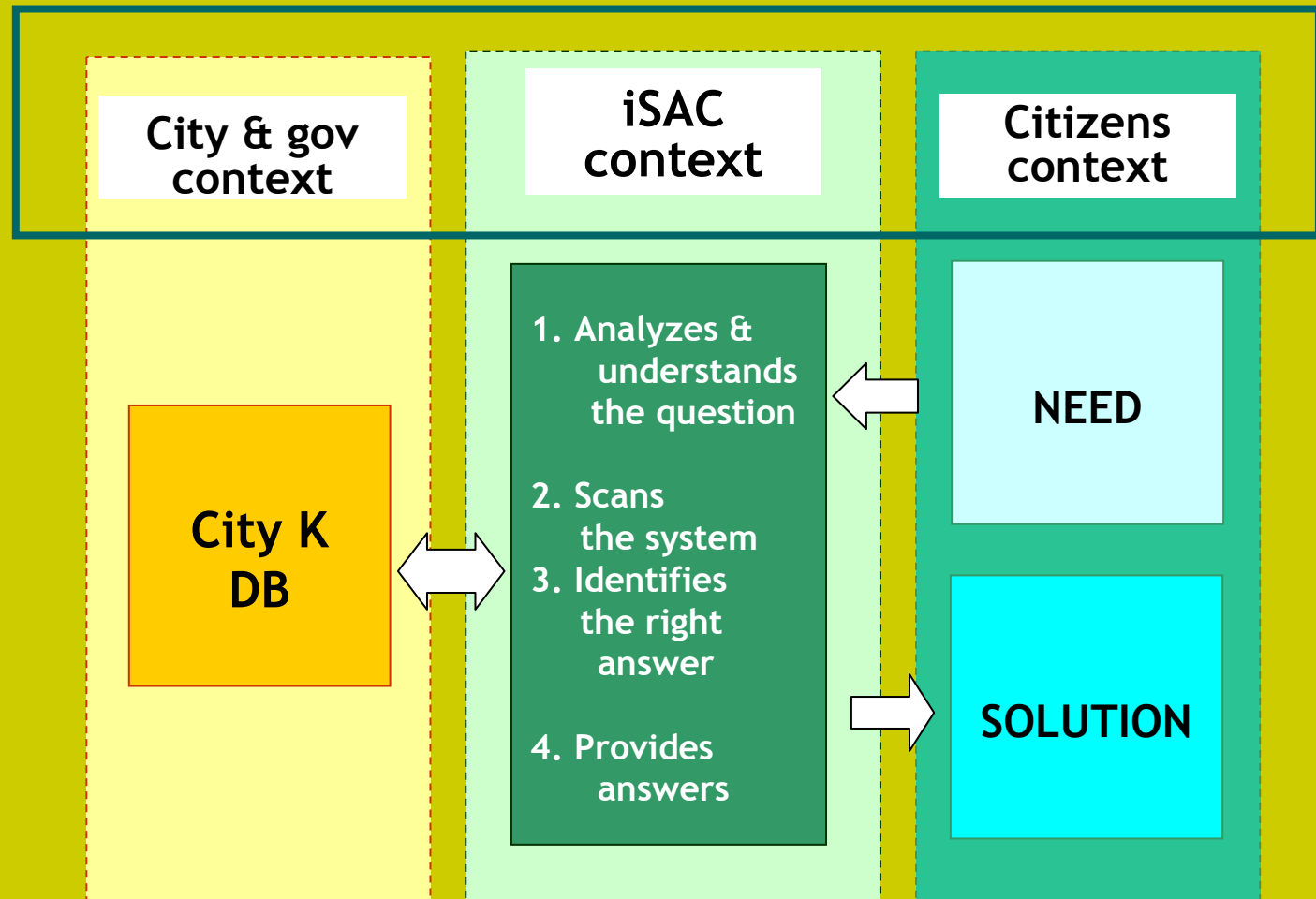
Budget

- 2005
 - 20.000€ from CIDEM (Catalan Govt. for SMEs)
 - +50.000€ from Univ. of Girona
 - 2006
 - 150.000€ - AOC Consortia
 - 35.000€ - City of Terrassa
 - +60.000€ - University of Girona
 - 2007
 - 89.000€ - AOC Consortia
 - +25.000€ - City of Terrassa
 - +60.000€ - University of Girona
 - 2008
 - Applications for + 1.3 million€ to Spanish govt.
 - Applications for + 500.000€ to AOC Consortia
- } +- 500.000€

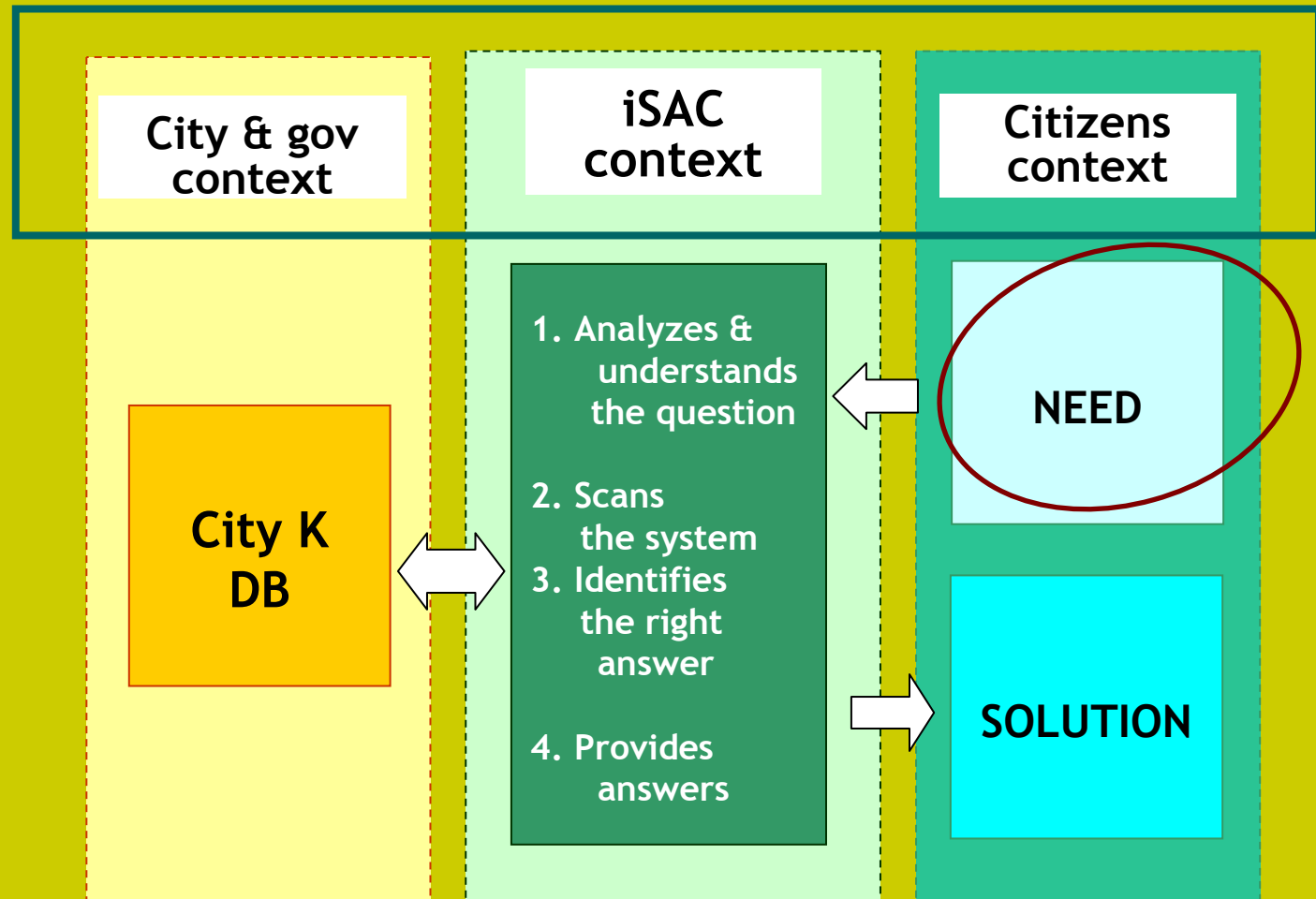
The objectives

- Developing a new channel of accessing public general information and services
- Improve transparency and trust in PA
- Obtain a learning citizen centric eGov service
- Available 24 hours 365 days a year, via the local website
- Avoiding the overloading of the existing services, allowing for better services to people with special needs at no extra cost
- A system to help evaluating citizens' services continuously
- Setting up a new form of Citizens Attention Services in European towns and cities
- Provide standard methods and technologies required by the Citizens Services to encourage and support the mobility of European citizens within the EU

The SAC – iSAC model



Identifying citizens needs/wants



An open context

- Public information & City information:
 - Available services (public & private)
 - Activities, calendar of events
 - Learning opportunities' information & registration
 - Public hiring
 - Mobility & transport information
 - NGOs, voluntary organizations
 - Map & geographical information
- Connection to public services
- A hand in procedures, models, forms
- Access to participation processes and activities



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This is possible only if...

- ✓ we build and
- ✓ care a social network (people, institutions, NGOs, active private sector)
- ✓ and merge all their activity data in a unique city DB through which we all will help others

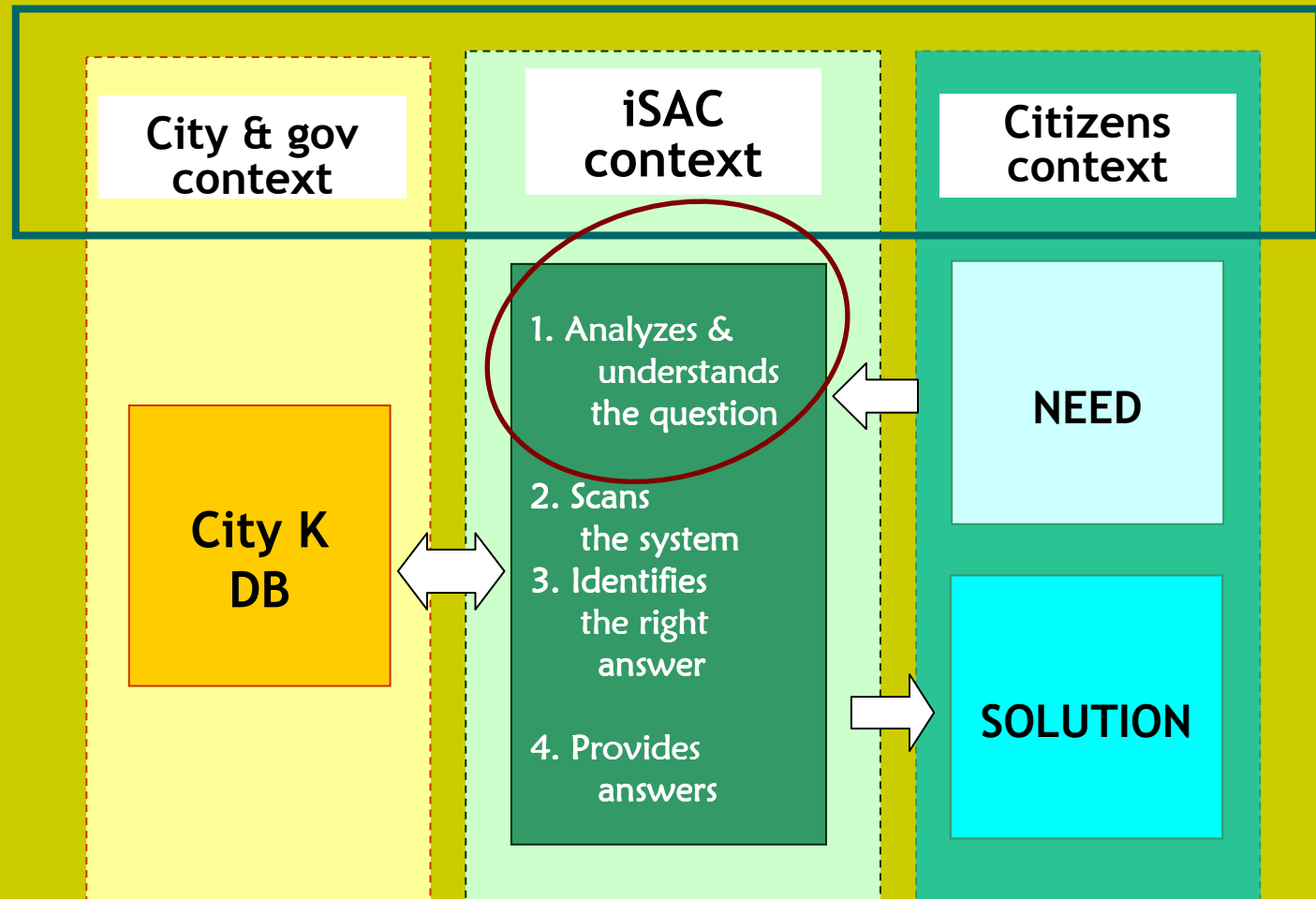


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Understand the question

Satisfying the need



Being natural and learning

iSAC can recognize the question

in the natural language of the citizen, even

- With orthographic errors
- In non administrative language
- With informal local jargon

And **learns from experience**



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Natural language and flexibility

- *stop words* elimination
- Lemmatization
- Orthographic revision
- Morphological analysis
- Barbarism treatment
- Localization, local relevance terms
- Synonyms and *pseudo* synonyms
- Local phrases and context expressions



Semantic contexts

- **Local**
City / area semantic context
("The bus building")
- **Personal**
Understanding personal contexts, usability trends and preferences
(Text size, language, ...)
- **Community**
The semantic trends of a specific group of people
(Stamps collectors, dog fond people, fans clubs,...)

The local SEMANTIC network

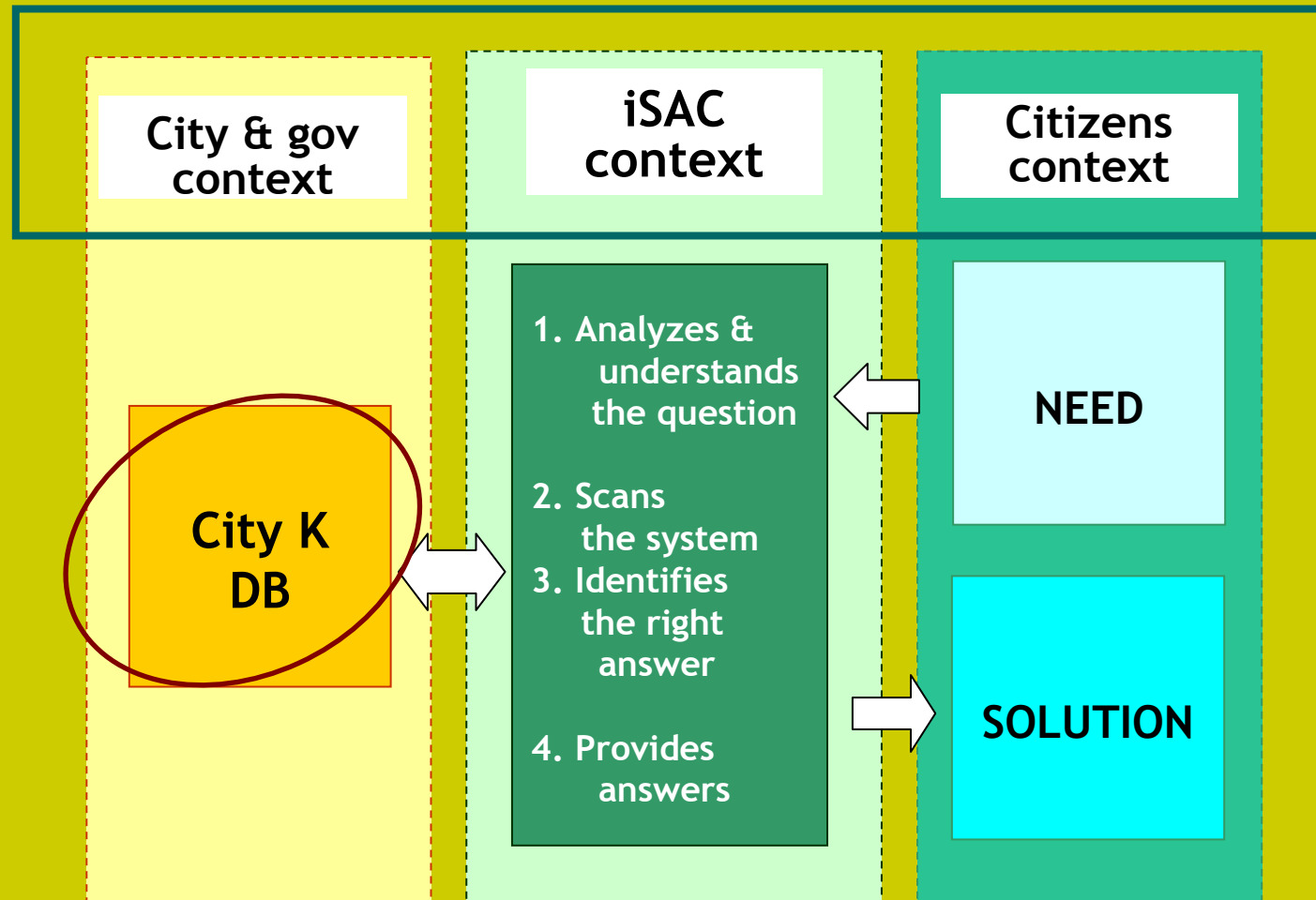
- Synonyms
- Local vocabulary
- Cultural expressions
- Local monuments, popular places, historic names, traditional names, specialties, ...
- Constantly updated with iSAC learning facility
- ...



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City & city government context



Structured information in DB

DB is maintained from city government, but its content is made of:

- It's own information system
- DB with useful city information created from the social network

We need **iCities** (**i** for information, intelligent, innovative, interoperable, ...) to create such a context in which this culture is possible

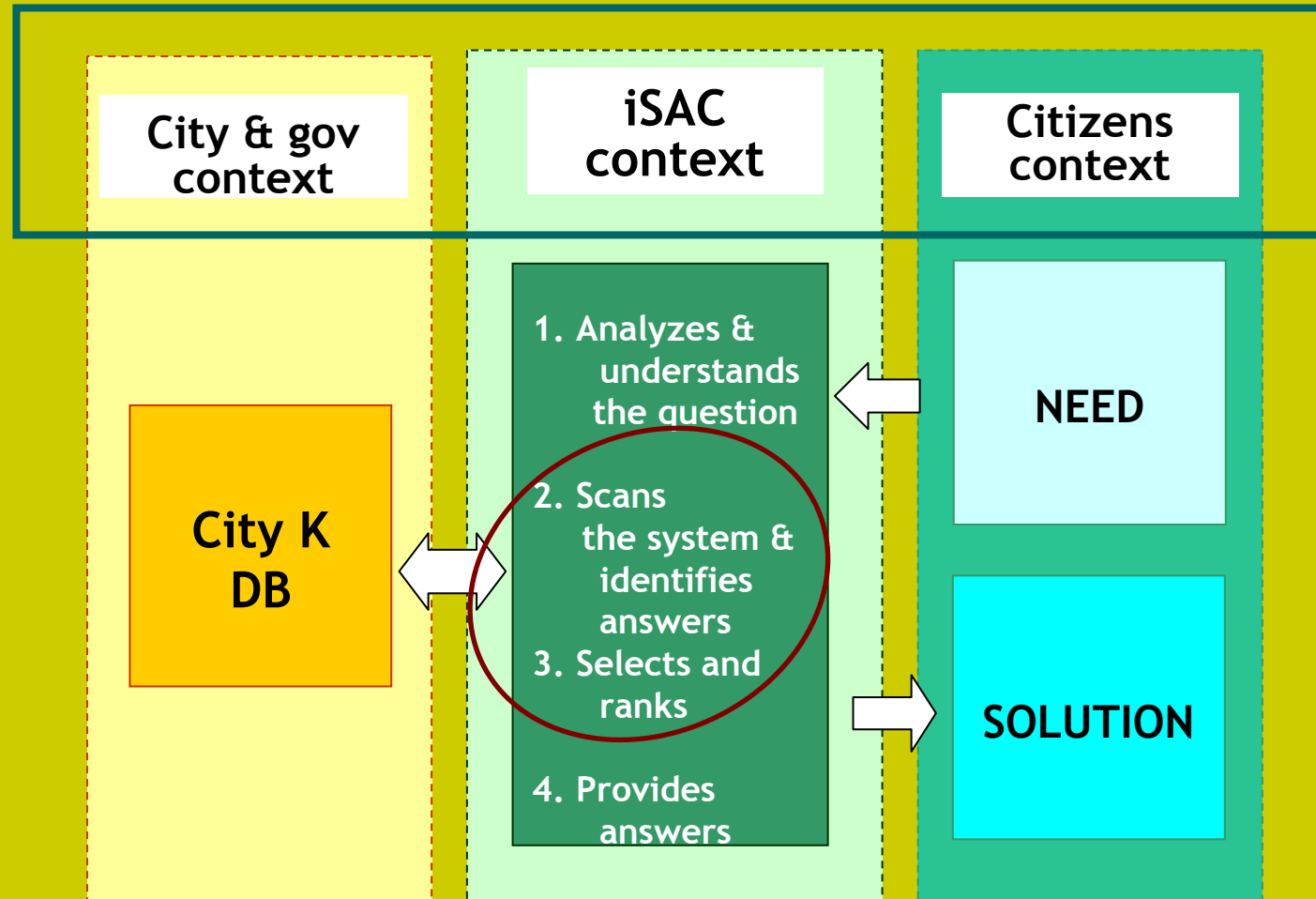
Then, knowledge in the DB belongs to the citizens



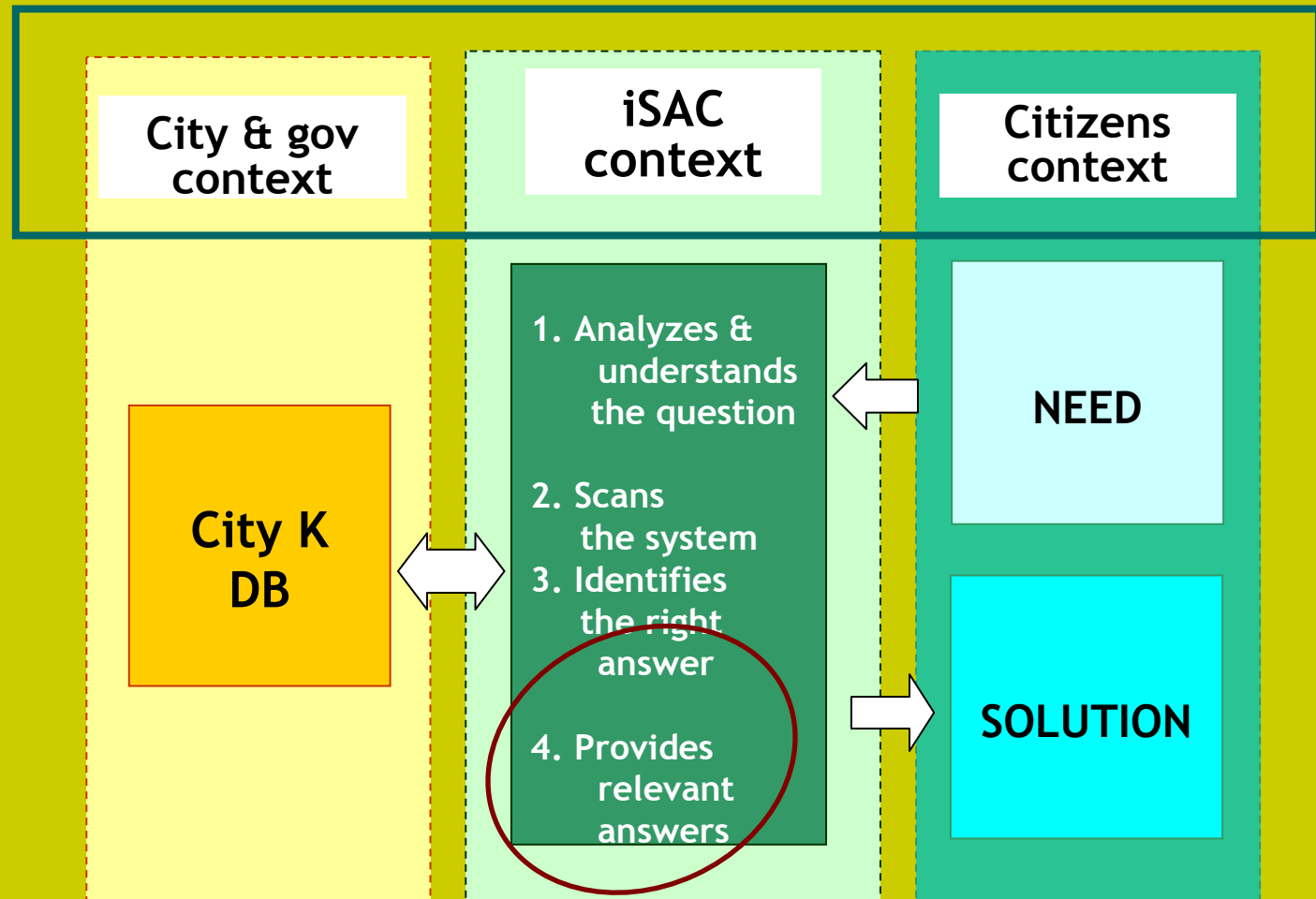
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The distiller



The editing process

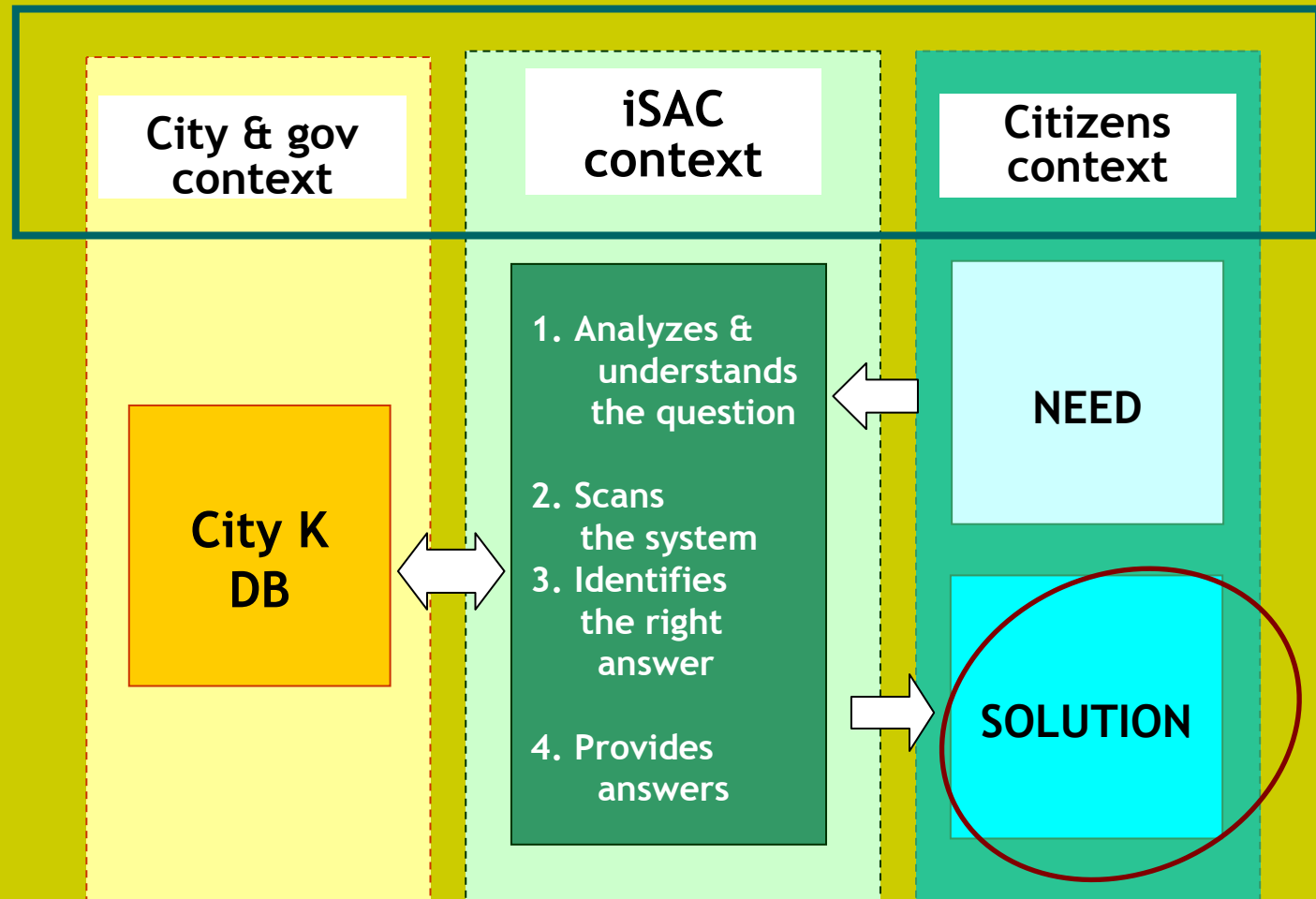


What is a correct answer ?

True, complete, direct answer, easy to understand,
...**RELEVANT TO USER**

- A tailored text
- City Government pretreated information
- A web page with the specific content
- A set of maximum 3-5 possible very similar references
- A list of all existing services of a kind (bank offices, health NGOs, ageing homes, ...)

...



What if... iSAC cannot give a correct answer?

There is always a human being behind iSAC
automated service!

The system suggests:

- e-mail message
- a direct IP call to call center (office hours)
- a call back from office
- Chat facility (call center office hours)
- WikiFAQ, to allow citizens help with their own experience
- ...

No hem trobat resposta per la pregunta realitzada. Pot posar-se en contacte amb nosaltres utilitzant les diferents opcions següents:



Quality indicators



- # demmands
- % correct answer
- Attention times (system's capacity)
- New information data into the K System
- User satisfaction
- Employees + to back office services
- # FAQs – in phone calls & offices walk-ins
- Service cost freeze
- ...

Citizens' feed back

- System always asks for feedback on user satisfaction
- The perception of VALUE, usefulness, is its key for success

Ajudeu-nos a millorar.

Valoreu el servei rebut: Dolenta 0 1 2 3 4 5 6 7 8 9 10 Bona

Tens algun comentari a fer sobre la cerca:

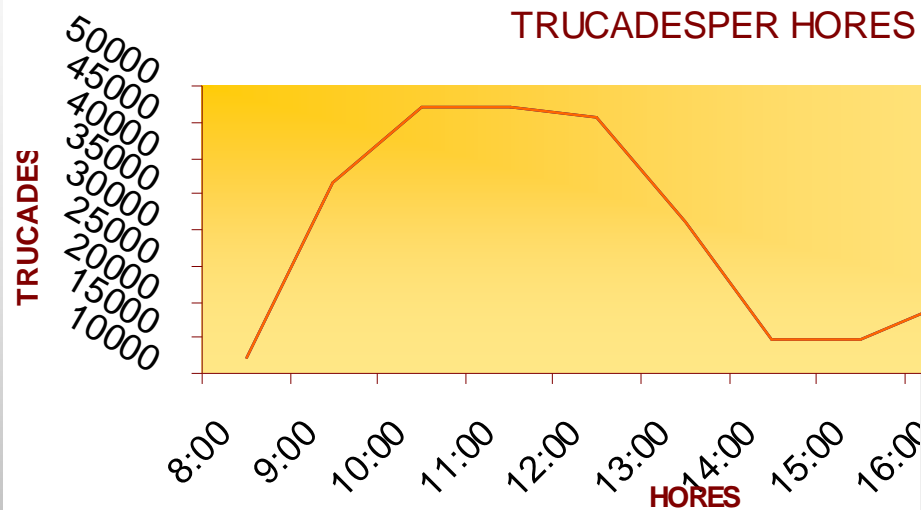
Enviar

But we can learn from citizens' inexplicit feed back :

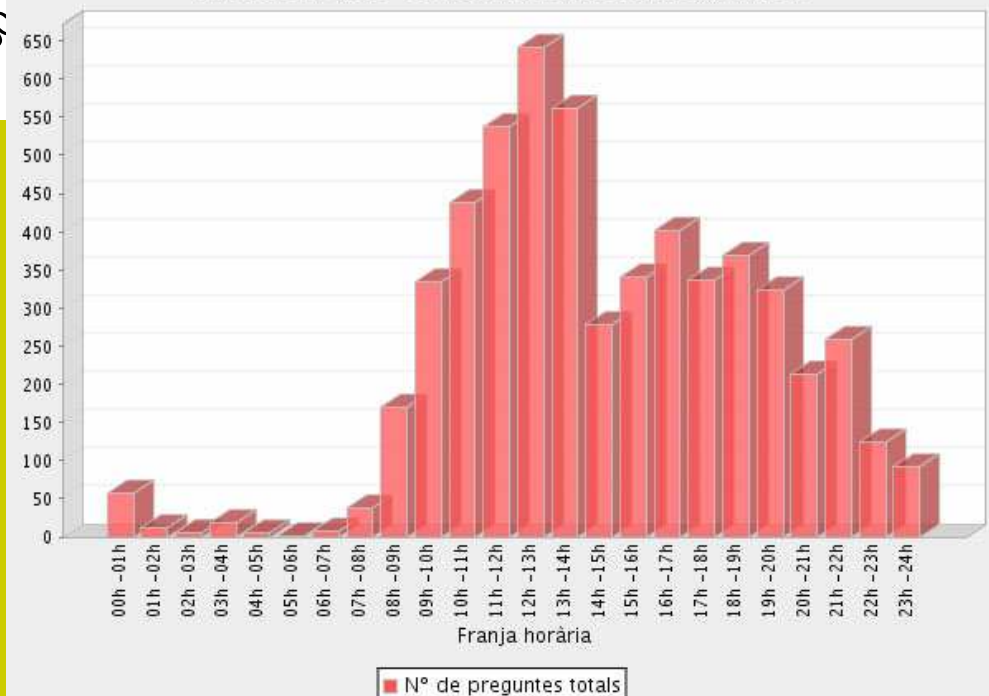
- Learn HOW they communicate with govt. help us to ease processes and produce better documents
- The MOST demanded themes are calling for the best updating
- TEMPORALITY of issues is helping service proactivity

Listening to citizens is a way to building
TRUST and enhancing PARTICIPATION
in public administration

When are citizens using iSAC?



Hora en que es realitzen les preguntes

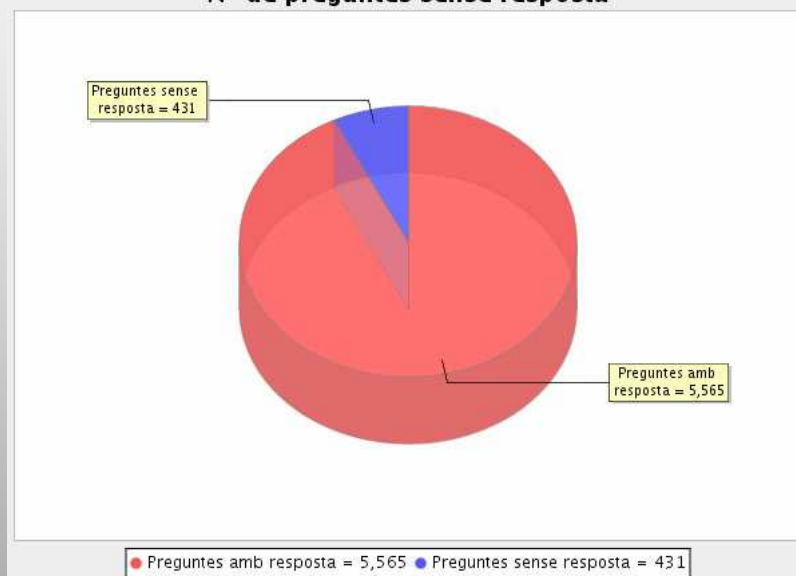


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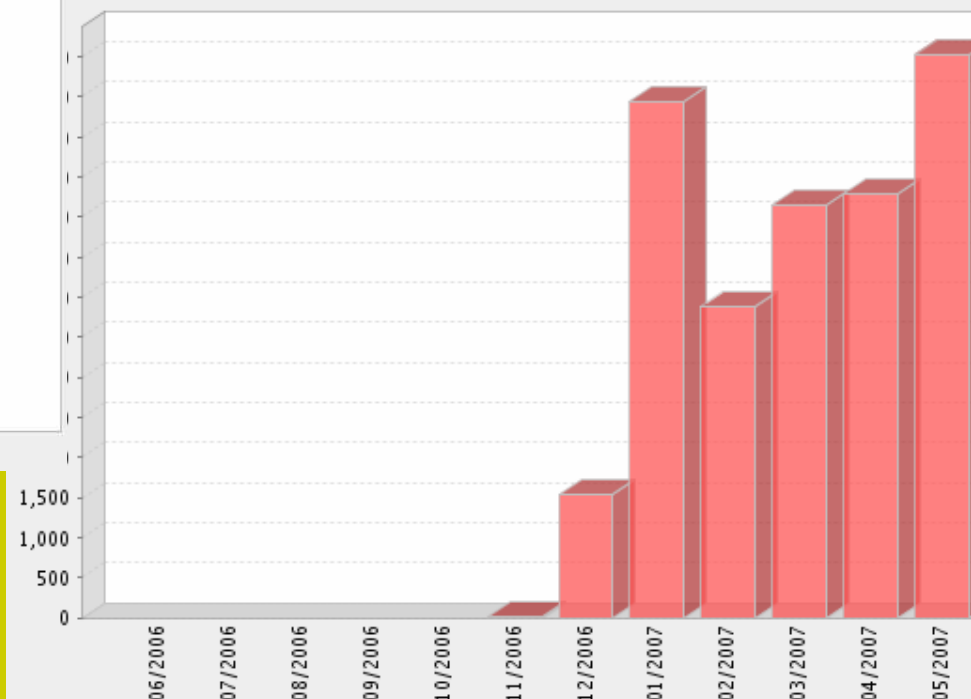


Per month demands

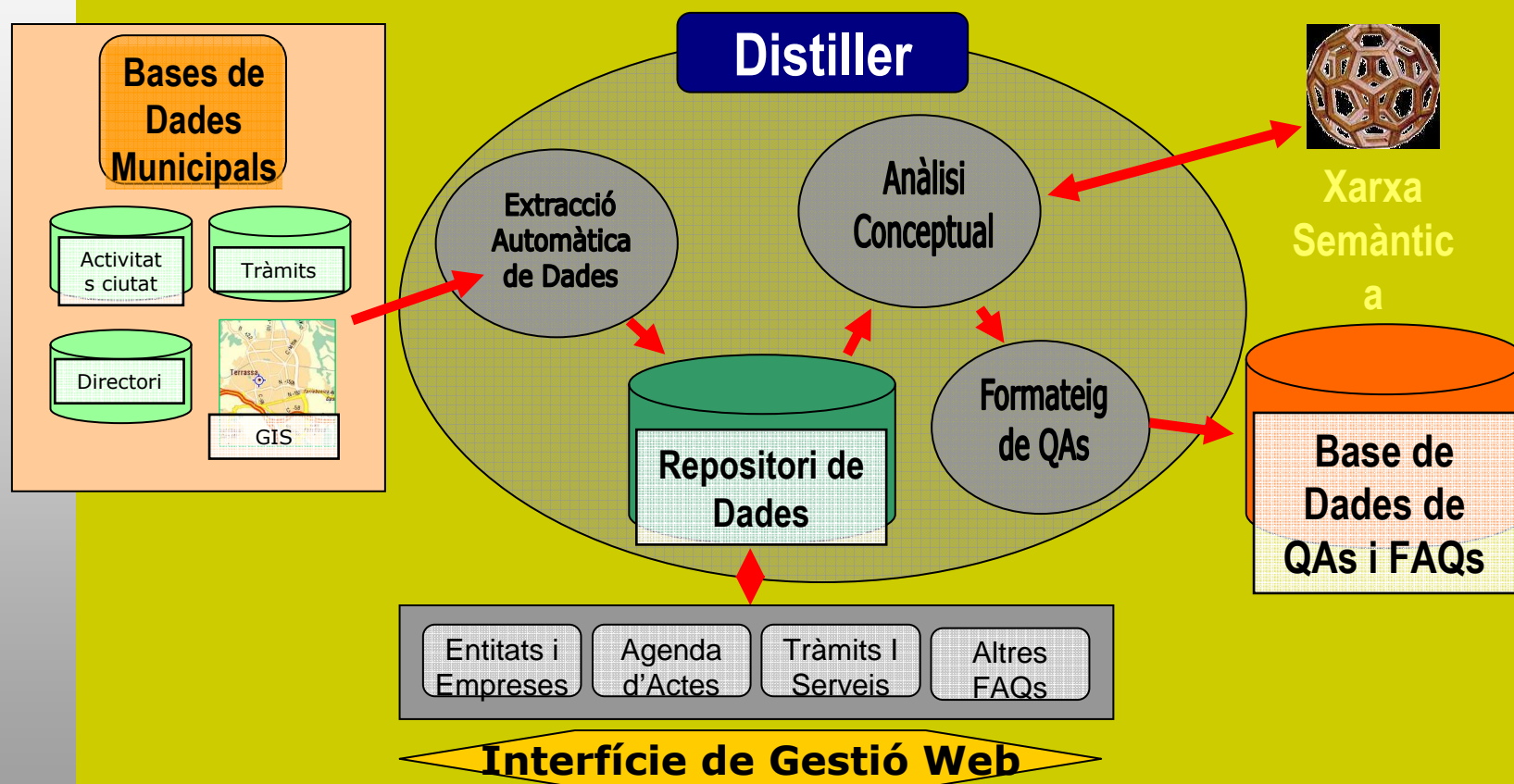
Nº de preguntes sense resposta



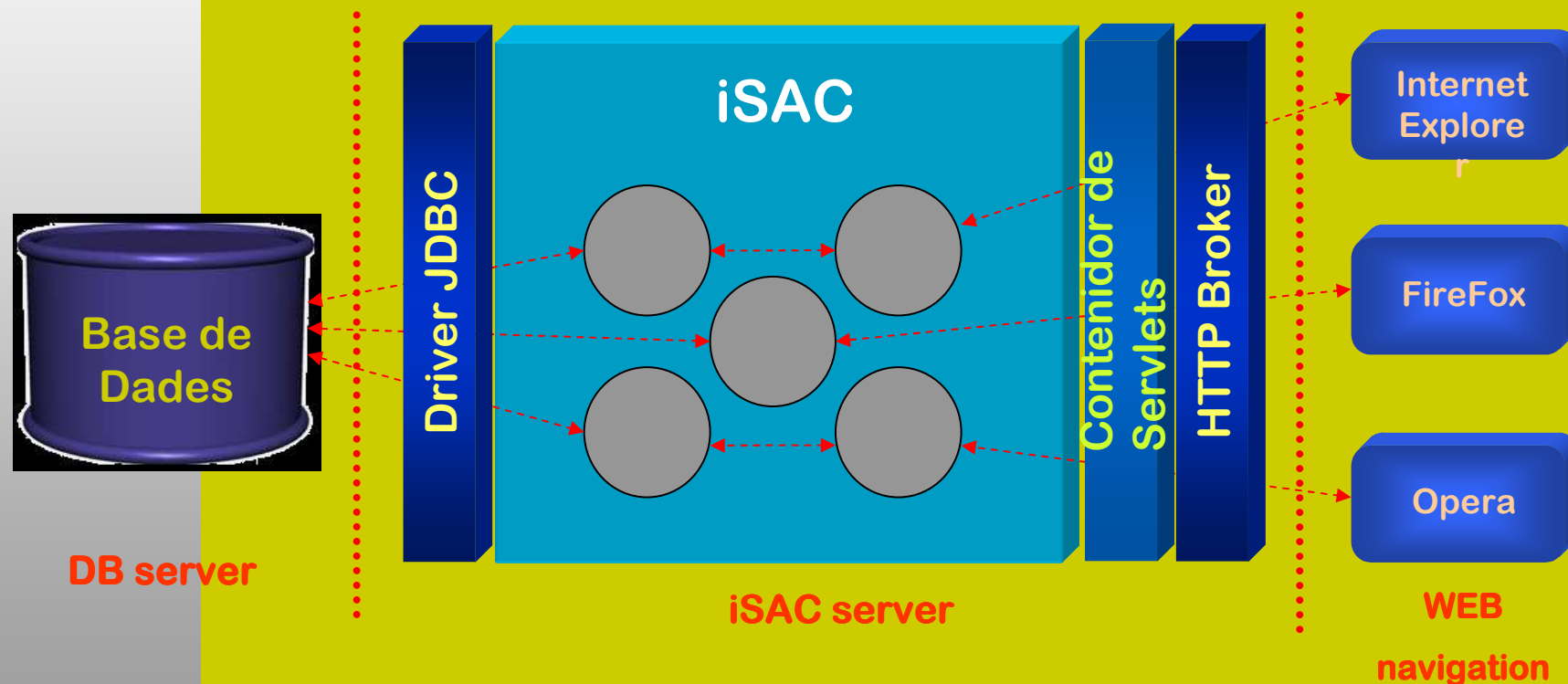
Nº de preguntes mensuals



How does iSAC work from inside?



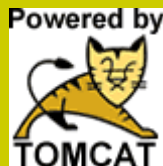
Systems' architecture



Technological features

OSS software

- Language: JAVA, Servlets i JSP
- Web Server: Apache Tomcat
- DB: POSTGRES
(prepared for ORACLE 8 & 10,
My SQL & SQL Server)

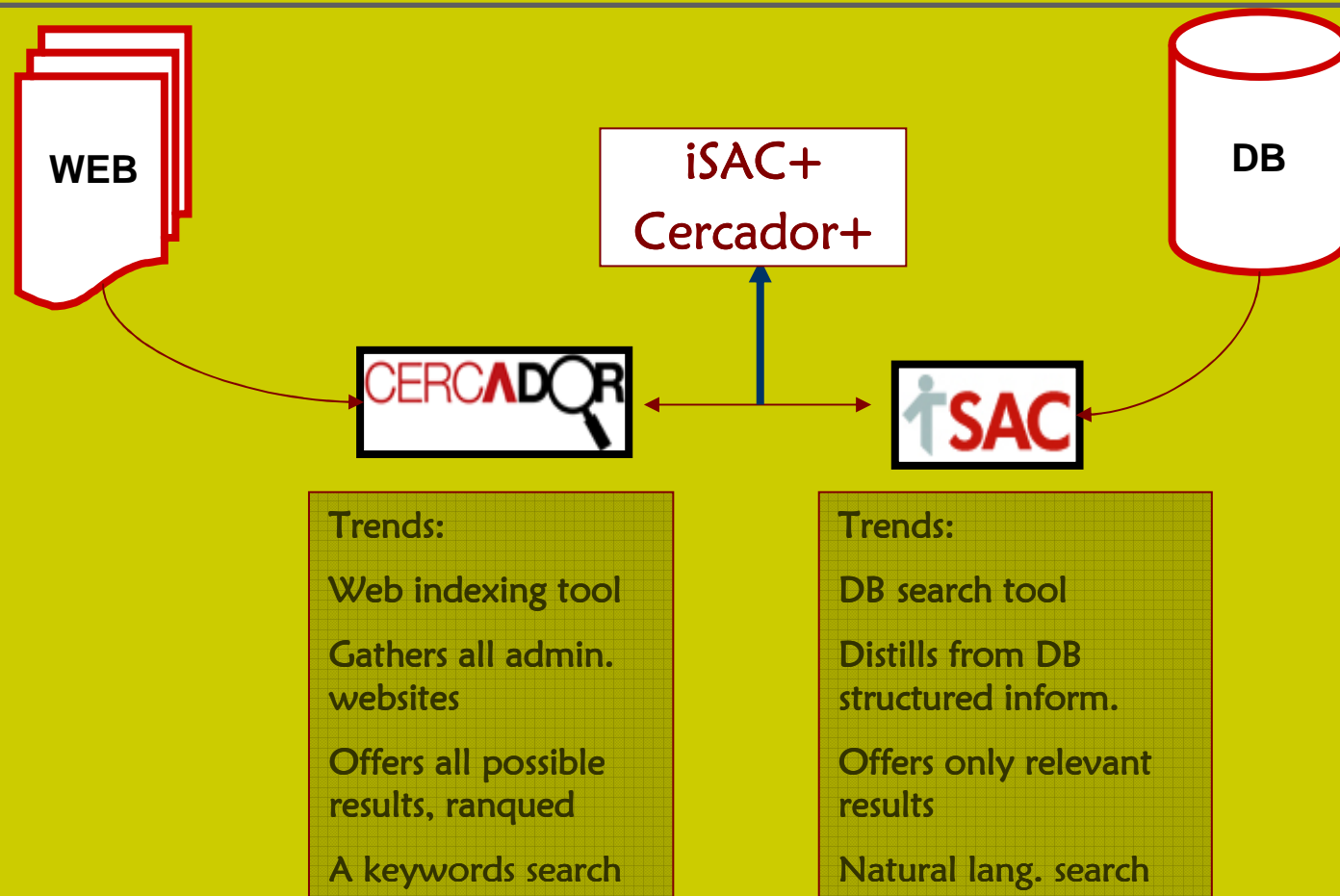


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OSS

Empathy, integration, collaboration



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Integration with other OSS tools

- ID cat – digital certificate
- On line procedures, an AOC system available to all cities



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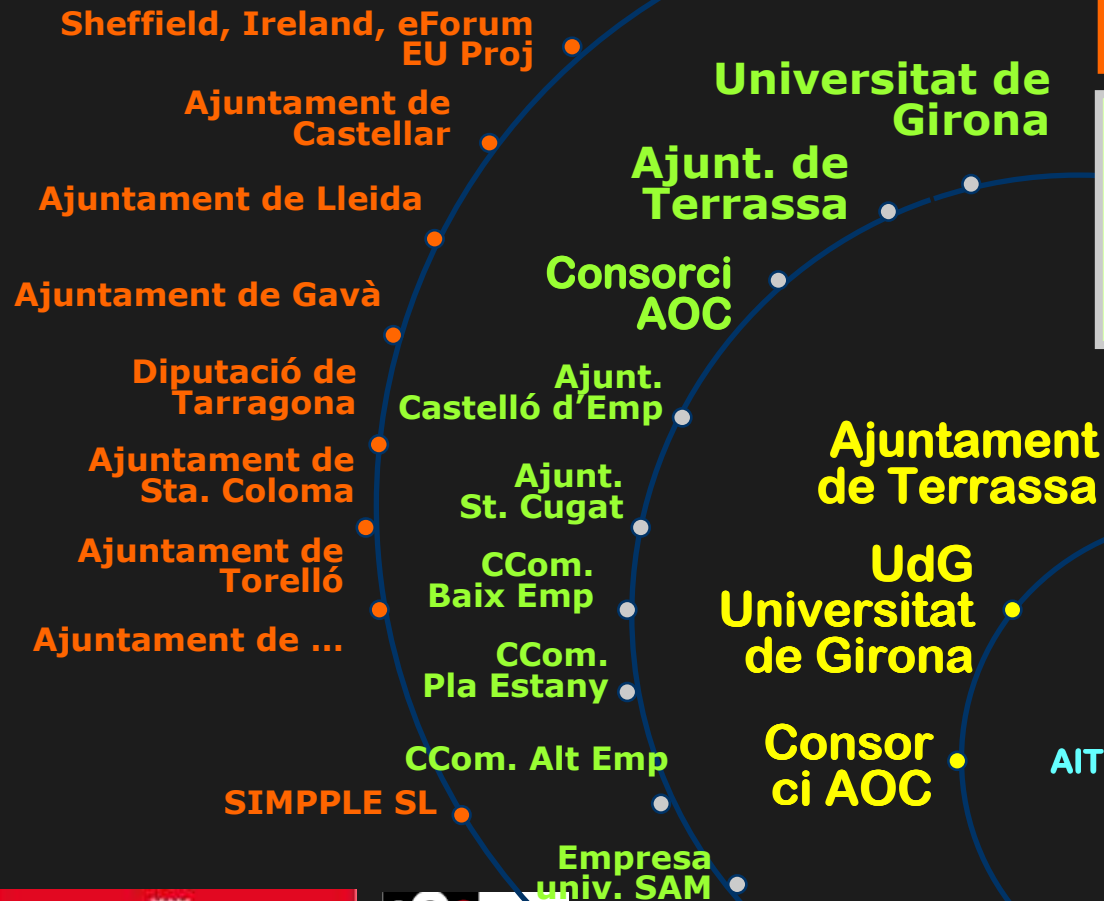


Lessons learnt when confronting and challenging iSAC

- iSAC as an information integrator in public admin.
- New features and functionalities to be developed, as specialized information –consumer, scholar-
- There is a need for a modular tool
- Confirmation of the appropriateness of building a users' group
- The need for adopting a unique taxonomy for citizen services
- Since there is a deep will for sharing (tools, ideas, problems and solutions!) within the sector, we are on the process to build a *Living lab*

iSAC users' group

Consorci AOC- Aj de Terrassa- UdG



+ iSAC 2008-11

Solució tel.
Multicanal (TDT, ...)
Llenguatges (AL, IT, ÀR)
Gestió SAC
...

+ iSAC 2007

Xat
wikiSAC
Multicanal (PDA, mòbils)
Llenguatges (EN, FR)
Manteniment M Bàsic

iSAC 2006 bàsic

Refinament
comprensió
Entorn Web
Distiller
K Ciutadà

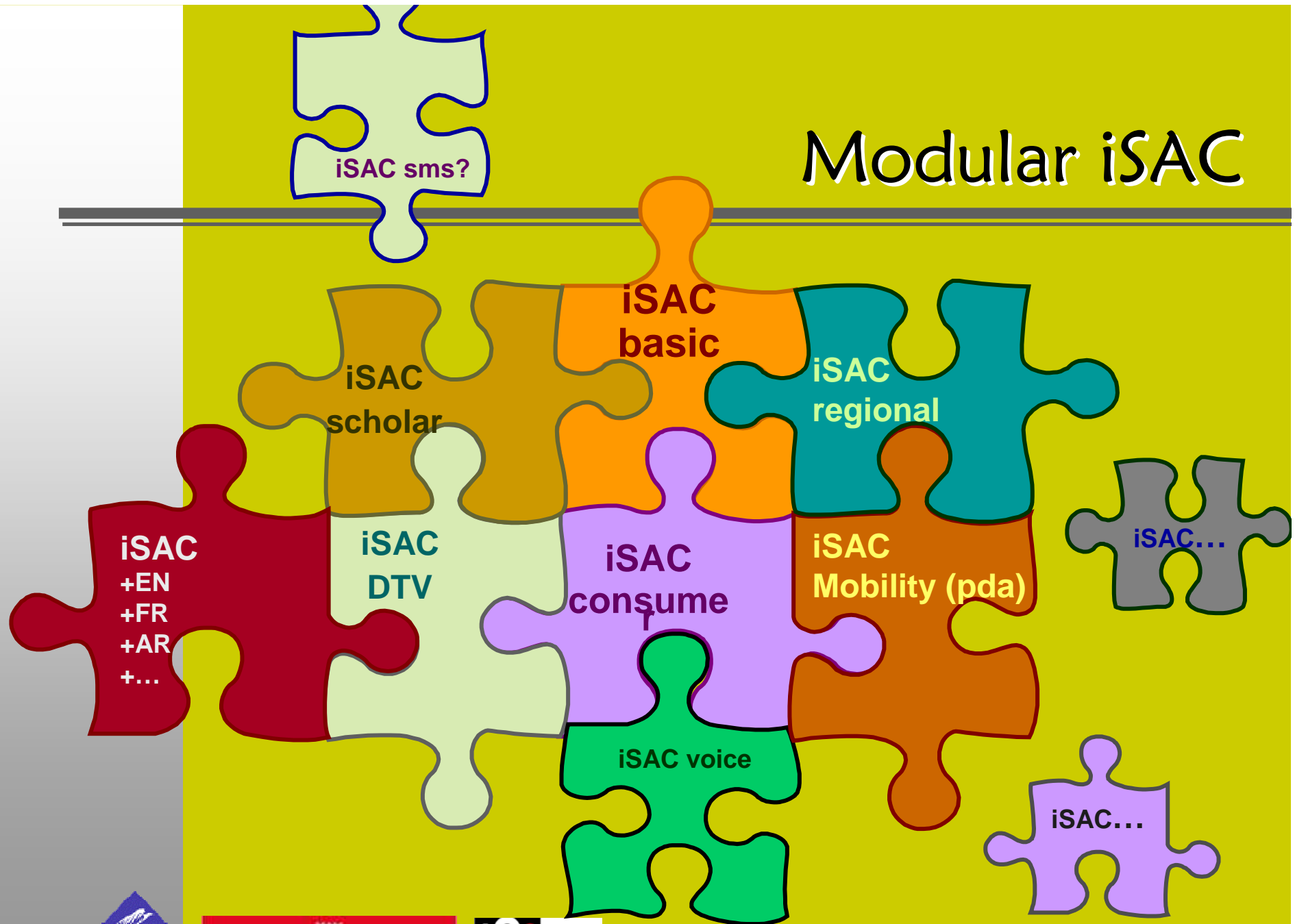
SAM
nucli iSAC
Motor LN
Disseny



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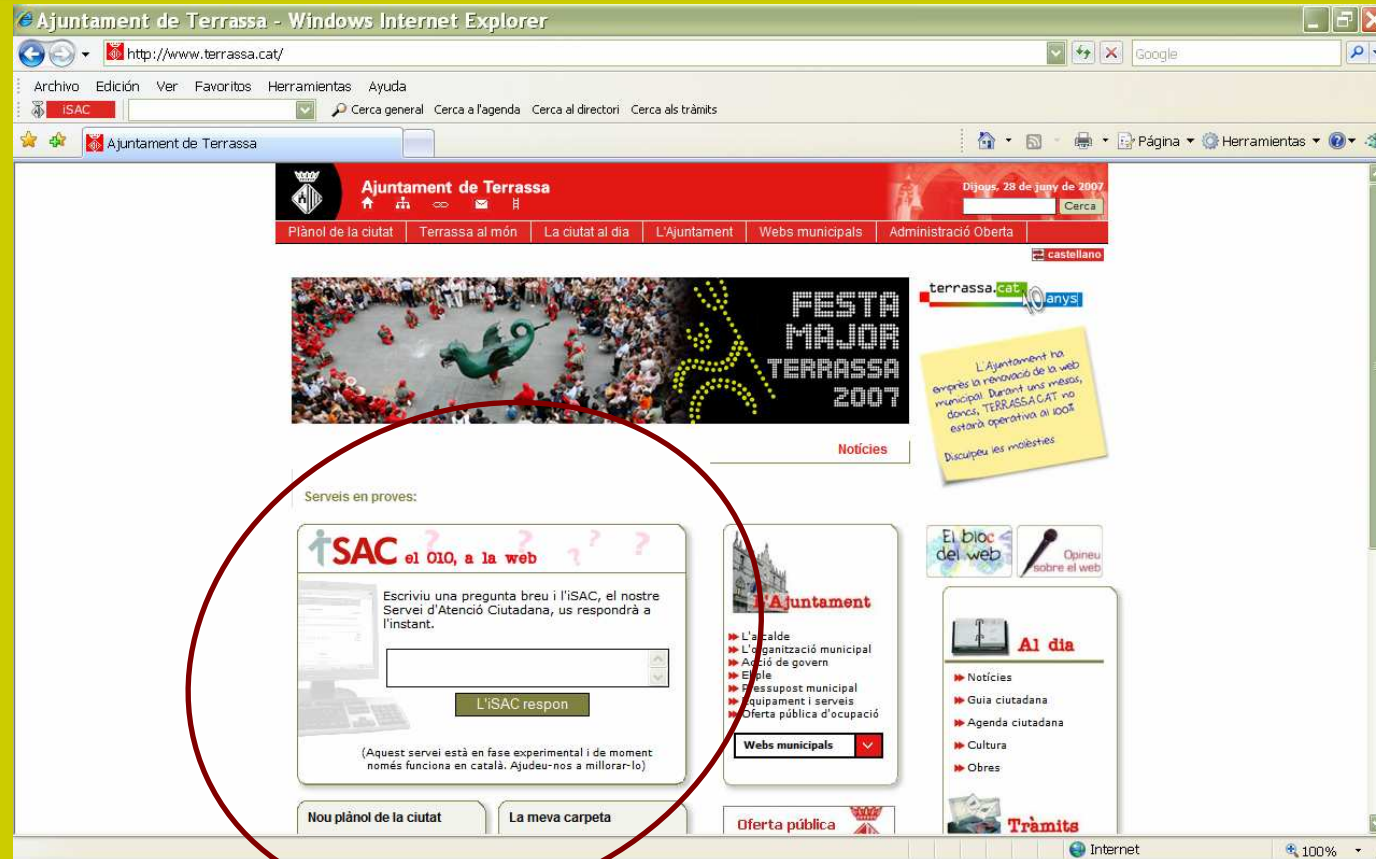
Modular iSAC



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Where to go to challenge the system?



www.terrassa.org



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<http://www.udg.edu>

