

A larger version of the Smart Gov logo, featuring a lightbulb with radiating lines and stars, positioned to the left of the text.

**Smart
Gov**
ILLUSTRATED

A step-by-step guide to creating
e-services using the SmartGov platform

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1 Introduction

This document can be used as a tutorial about creating a simple electronic service using the SmartGov Platform. It describes in a sequence of simple steps the design, creation and deployment of a one form electronic service. It is a good starting point for domain experts and IT staff to familiarise themselves with the platform.

The rest of the document illustrates the major phases of service creation using the SmartGov platform, and more specifically:

1. Designing the form
2. Launching the SmartGov platform
3. Creating the TSEs
4. Creating the TSE groups
5. Creating KUs
6. Creating forms (semantic part)
7. Creating the transaction service
8. Designing the form visual part (HTML layout)
9. Deploying the service

For a complete coverage of the different topics and for more advanced features, consult the SmartGov platform reference documents.

2 Designing the form

1. Design by hand in a piece of paper the layout of the new service you want to develop.

The image shows a hand-drawn form titled "Request Password". The form contains the following fields and elements:

- first name: [input field]
- last name: [input field]
- tel.: [input field]
- Address: [checkbox]
- street: [input field]
- number: [input field]
- ZIP Code: [input field]
- Area: [input field]
- City: [input field]
- Country: [input field]
- E-mail: [input field]
- Username: [input field] [checkbox]
- Submit: [button]

Figure 1 - Designing the form on paper

2. Decide which TSEs and TSE Groups need to be created. Keep in mind that each element in your form is represented by a TSE in the SmartGov Application. Think about any KU that would be useful not only for the end users, but also for the domain experts and the other staff. Decide on the validation rules and checks that are necessary for the submission of the service.
3. In our example you will create a service named **Request Password**, which allows the user to submit a request for a password. In this service the user is presented with a single form, on which his/her personal data will be filled in. The elements **First name**, **Last name**, **Telephone**, **username** and **email** will be represented by a single TSE each. The elements **Street name**, **number**, **Zip code**, **Area**, **City** and **Country** are grouped to form a TSE Group. This formulation is not mandatory; each element can be considered as a separate TSE. The grouping of TSEs is preferable when the information represented by them could be reused within another service. In this example, we consider that address data could be used again by another service, so we create a TSE Group to represent it.

3 Launching the SmartGov Platform

1. Open a web browser window. (Recommended: Internet Explorer version 6 or later or Netscape Communicator version 7 or higher).
2. Enter the URL of the SmartGov application at the *Address bar* and press *Enter*. The URL will be provided by your system administrator.¹
3. Enter your username and password in the *User* and *Password* fields respectively and press *Submit*.

Note: You can change the language used in the SmartGov application by clicking the appropriate flag icons located under the *Submit* and *Reset* buttons.



Figure 2 – SmartGov platform login screen

The web page you see below appears, which is the main screen of the SmartGov application. You can see the basic functions on the left column of the window. The *Knowledge Management (KM)* contains the *Knowledge Unit Editor (KU Editor)* and the *Taxonomy Editor*. The functions related to *Services* are the *TSE Editor*, the *TSE Groups Editor*, the *Form Editor* and the *TS Editor*. When one of these options is selected, its contents appear on the right.

¹ Your system administrator may have provided a *shortcut*, which will allow launching the SmartGov platform by simply double-clicking on the shortcut icon.

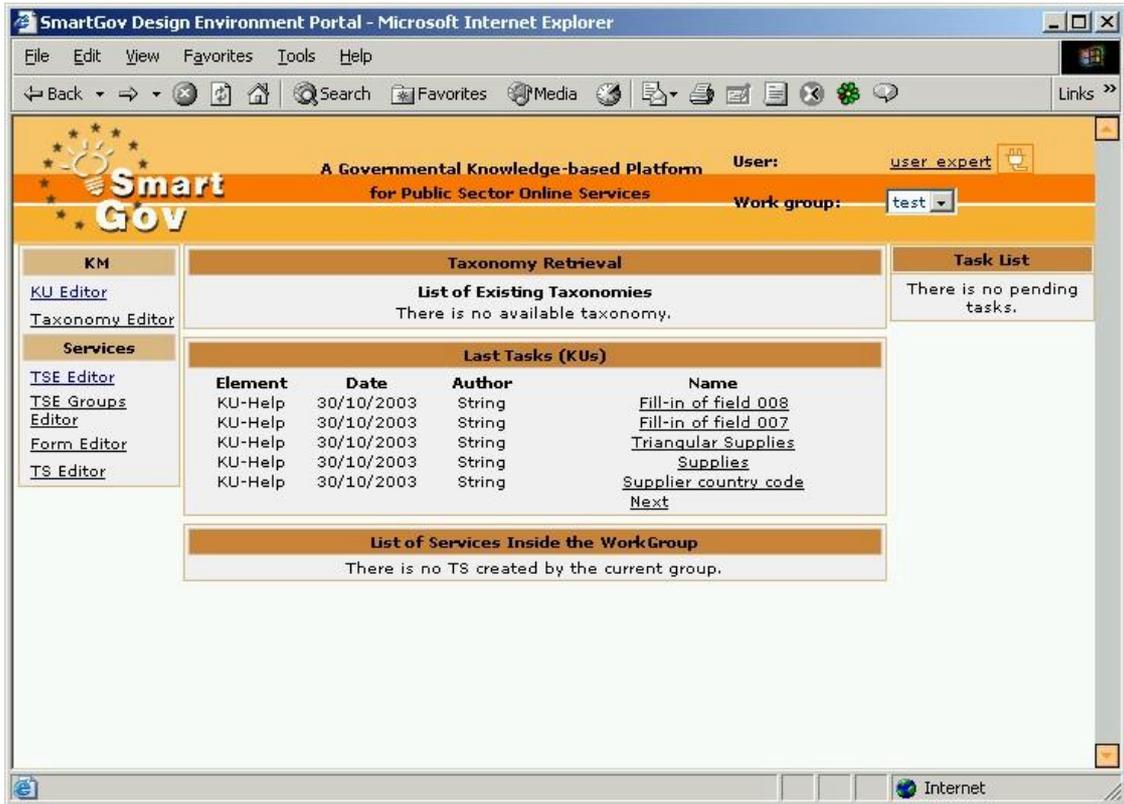


Figure 3 - SmartGov platform initial screen

4 Creating the TSEs

In this section the creation of the service TSEs will be described. Note that in this service, a group of TSEs representing the user address will be used. This TSE group contains the following information: street, number, area, city, zip code and country. Each piece of information is represented by a TSE, and the TSEs are grouped together in order to facilitate their reuse at a later time. The creation of a TSE Group is described in chapter 4. This chapter begins with the creation of the TSEs that will later be grouped to form the TSE group.

4.1 Creating the TSEs for the TSE group

Click the *TSE Editor* link within the right column menu, in order to bring up the TSE editor. The following screen appears. The main area shows the *Last TSEs* zone, which at the moment has "no available TSE" listed, and the *Last Instantiated TSEs* zone, where some instantiated TSEs from other services appear. Click the *New TSE* link in the *Last TSEs* zone to initiate the TSE creation procedure.

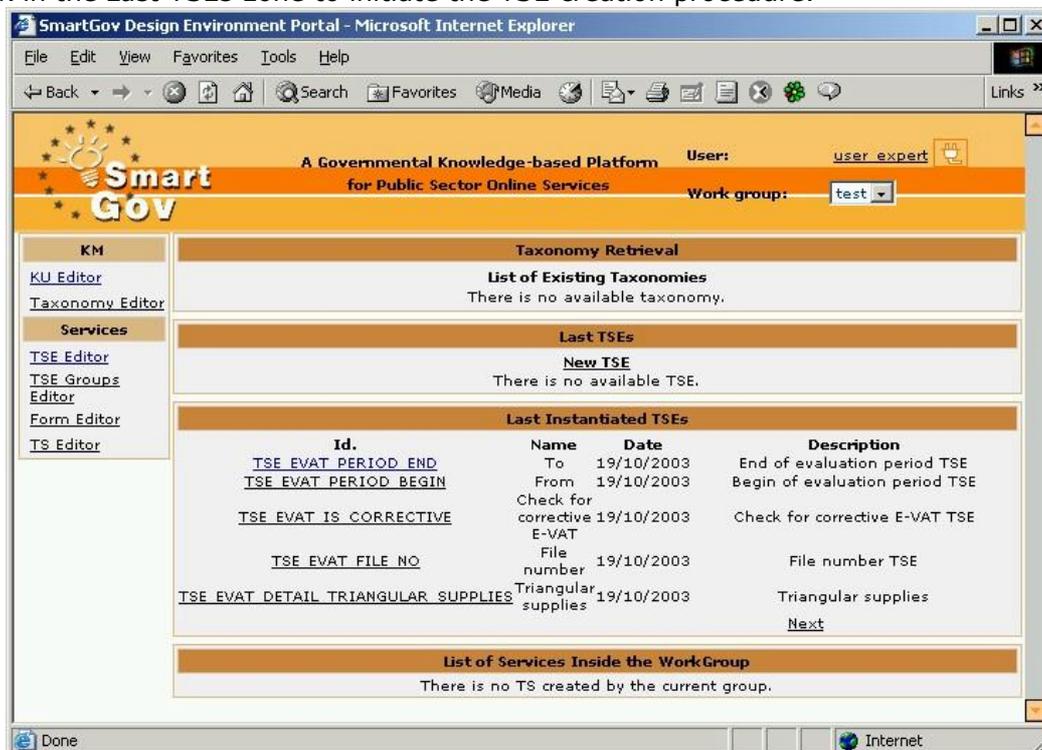


Figure 4 - Main TSE editor screen

1. A new window named *Transaction Service Elements Edition (TSE)* opens as shown below (Figure 5). All the options and the information needed to create a TSE are entered through this page. You can click the arrows at the left side of each orange row to unfold it, allowing access to specific properties. The Header data is visible when the window opens, because it is mandatory for the TSE creation. Fill in the fields with the appropriate data. You have to provide an Id and a name for the TSE you create in a single language, whereas the content of TSE is multilingual. It is recommended that in the "content" field, the text that will be presented to the end users be entered. In order to enter this text, a language from the drop down menu should be firstly selected; afterwards, the content should be typed in the corresponding field. Finally, click on the red tick

(Add) on the right side of the Content field in order to add the content in the specific language.

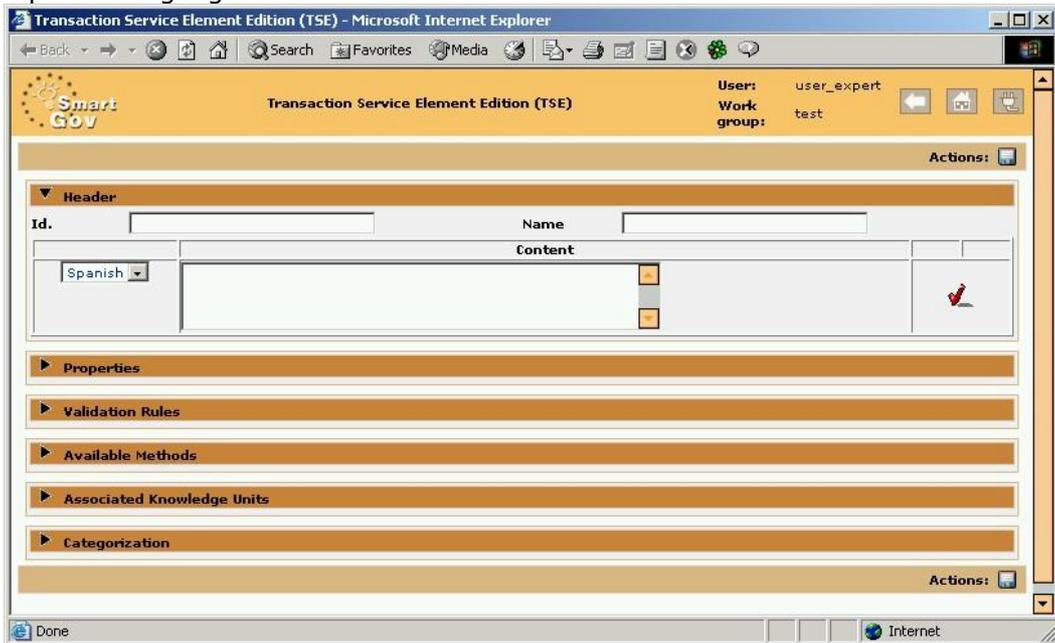


Figure 5 - TSE edition page

2. Enter the data as shown below. When you have added content for a specific language, a yellow ball representing the edit function and a waste bin, representing the delete function appear at the right side. Clicking on the yellow ball will allow editing the content; clicking the waste bin will delete this content. Content in other languages is defined in the same way. After defining content for a language, *always* click the Add to add the content.

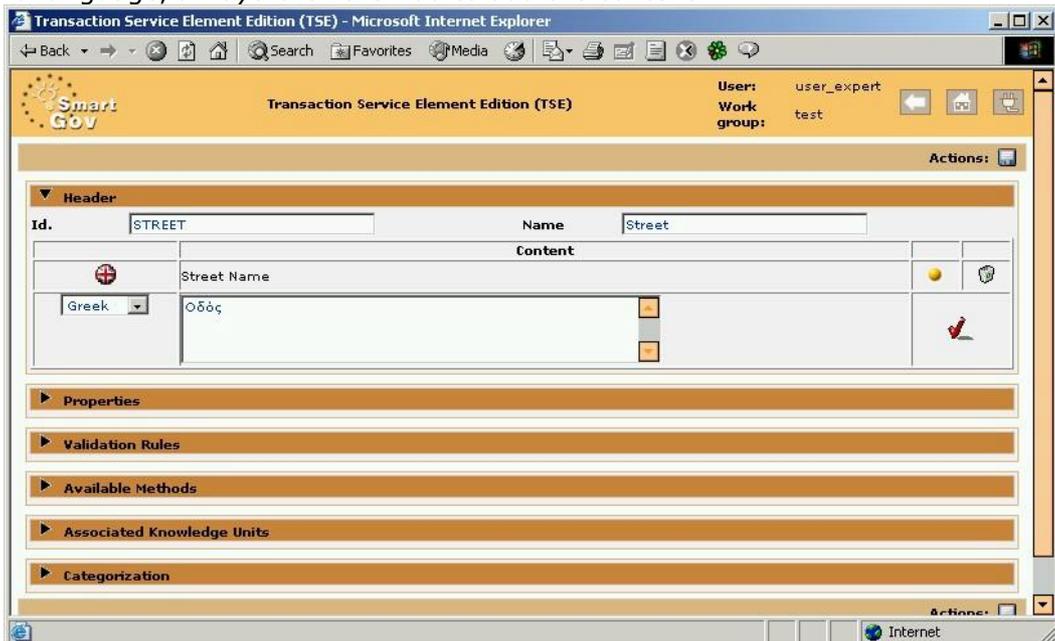


Figure 6 - Entering the header data for a TSE

- Click the arrow at the left side of Properties in order to see the options within this group. Here, the data type of the TSE, the maximum length, the TSE's default value and the allowed list of the TSE values can be defined². In this case, specify *Text* as data type for the STREET TSE with 50 characters as *Max. Length*. Click the Add tick to add the specific values of the fields in the TSE. (*Important notice*: that if the data type is *Number* or *Date* you must provide a default value.) You can click the arrows next to the remaining rows to see the additional fields for the TSE offered by the SmartGov application.

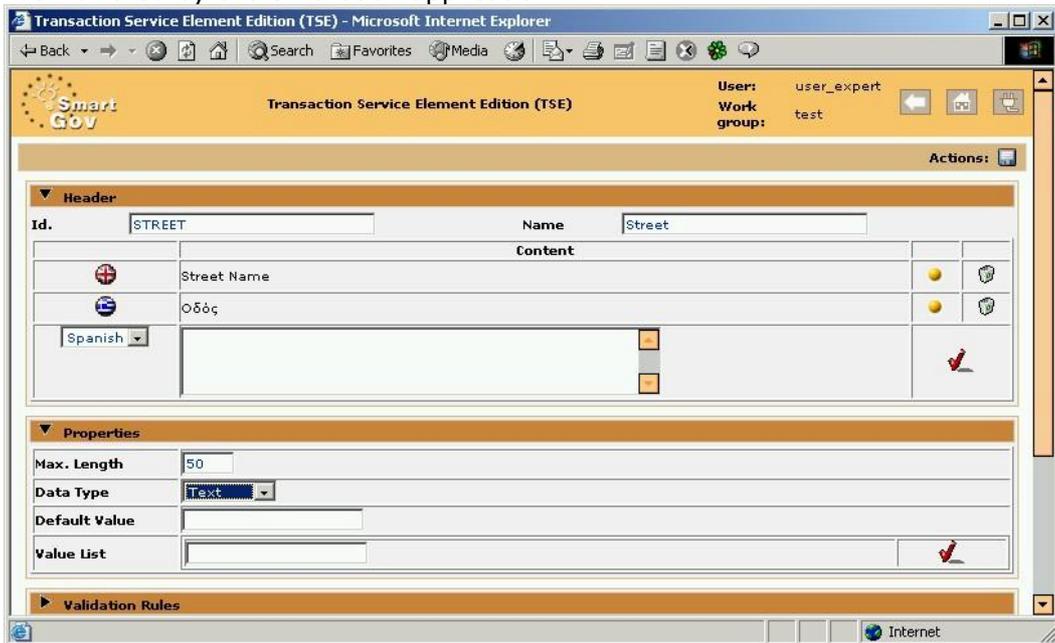


Figure 7 – Defining properties for the TSE

- When all the data for the TSE have been entered, click the disk icon at the right side of the *Actions* row to save the TSE. A message appears that informs you that the TSE has been saved. Press OK. A waste bin appears at the right side of the *Actions* row, in case you want to delete the TSE you created. The TSE can now be edited TSE and saved again (clicking on the disk icon), or deleted (clicking the waste bin icon). When you are finished with the TSE, click the left arrow (Back) at the top of the window to go back to the main screen of the SmartGov Application closing the TSE window. Or, you can simply close the Internet Explorer's window of the TSE Editor.

² A list of TSE values should be defined only when a small number of choices should be presented to the end-user. Other limitations to end-user input should be defined as validation checks (see section 7.1)

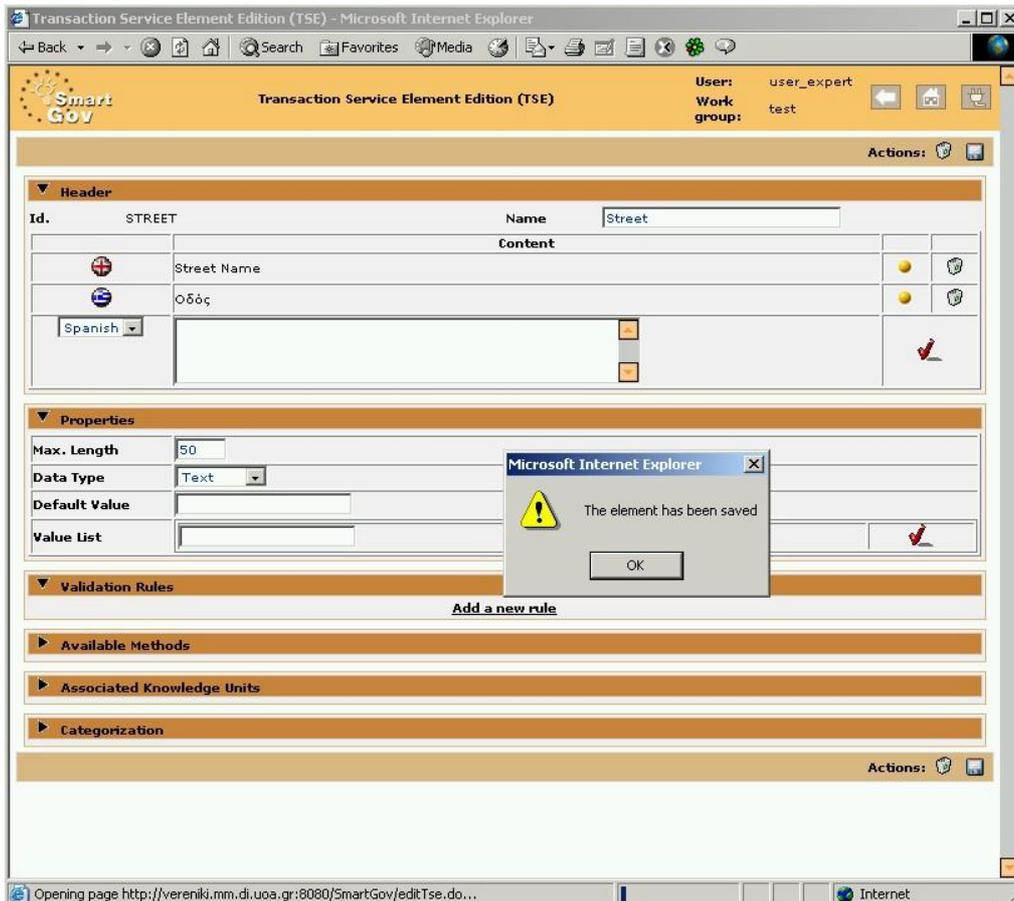


Figure 8 – Saving the TSE

5. Repeat the steps 1 to 5 to create the rest of the TSEs. The data to be provided for each TSE is described in the steps 7-11 of this section.
6. Create a new TSE named "Number", which represents the Street number of the address. Fill in the fields at the Transaction Service Elements Edition (TSE) window with the following data:

Field name	Field value
Id	NUMBER
Name	Number
Content (for English)	Street Number
Content (for Greek)	Αριθμός
Max Length	10
Data Type	Text

Press Save (disk icon) to save the TSE and close the window.

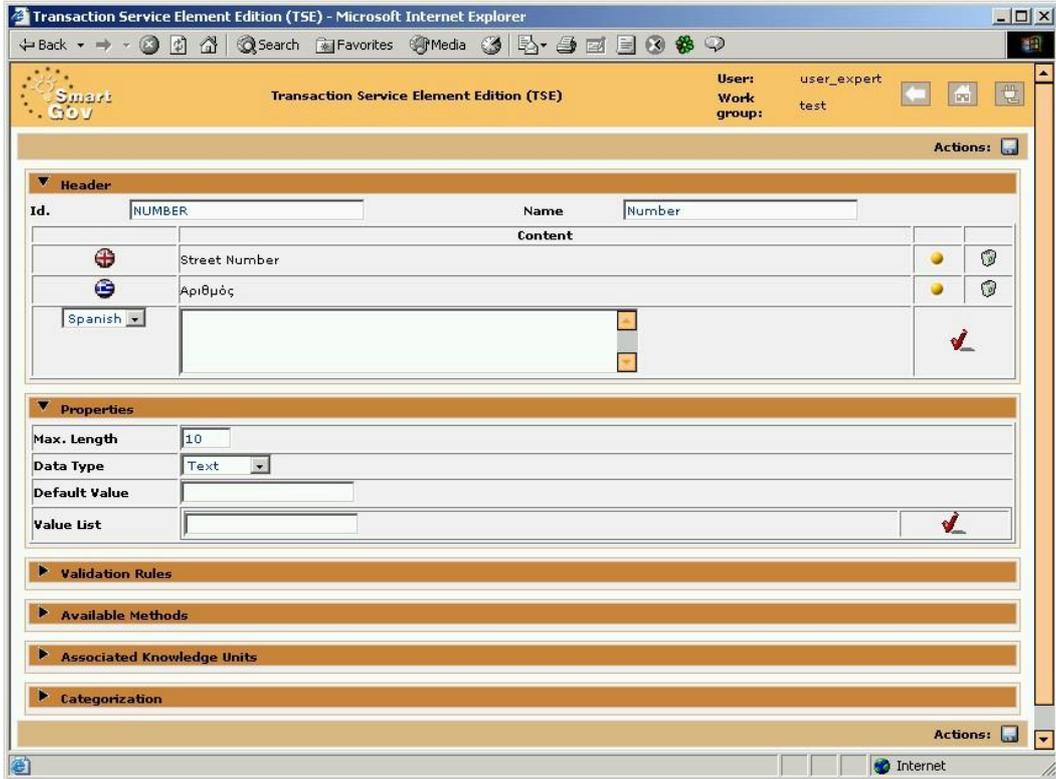


Figure 9 – Creating the “Number” TSE

7. Create a new TSE named “ZipCode”, which represents the zip code of the address. Fill in the fields at the Transaction Service Elements Edition (TSE) window with the following data:

Field name	Field value
Id	ZIP_CODE
Name	ZipCode
Content (for English)	ZIP Code
Content (for Greek)	T.K.
Max Length	10
Data Type	Text

Press Save to save the TSE and close the window.

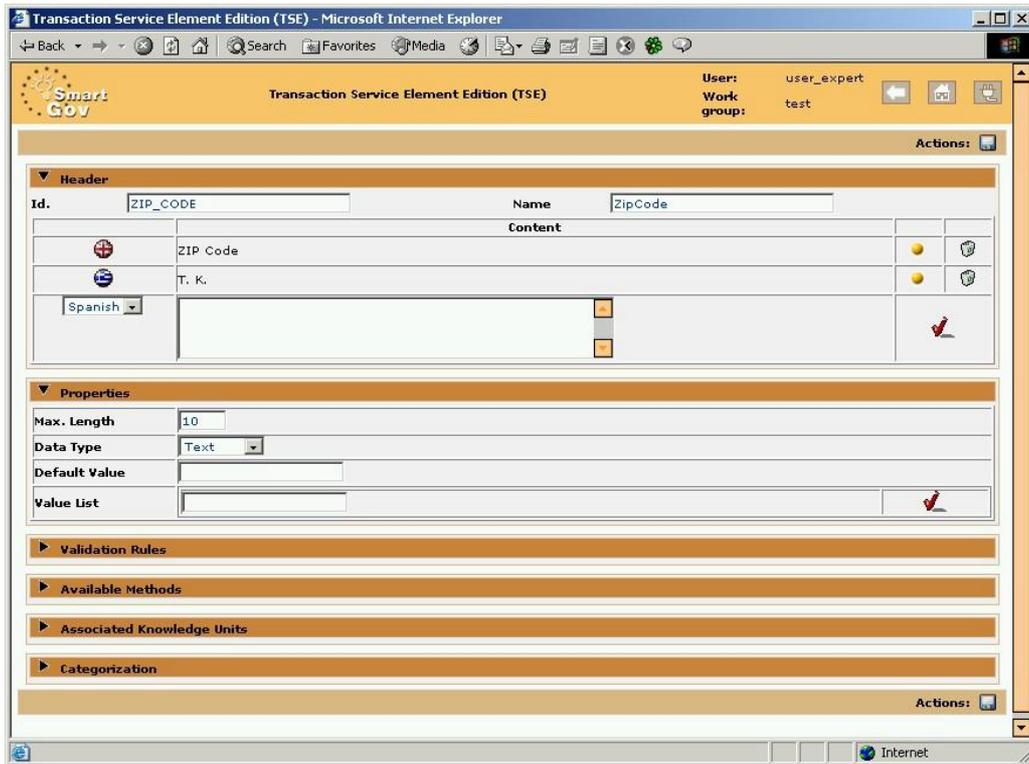


Figure 10 – Creating the “Zip code” TSE

8. Create a new TSE named “Area”, which represents the area name of the address. Fill in the fields at the Transaction Service Elements Edition (TSE) window with the following data:

Field name	Field value
Id	AREA
Name	Area
Content (for English)	Area
Content (for Greek)	Περιοχή
Max Length	50
Data Type	Text

Press *Save* to save the TSE and close the window.

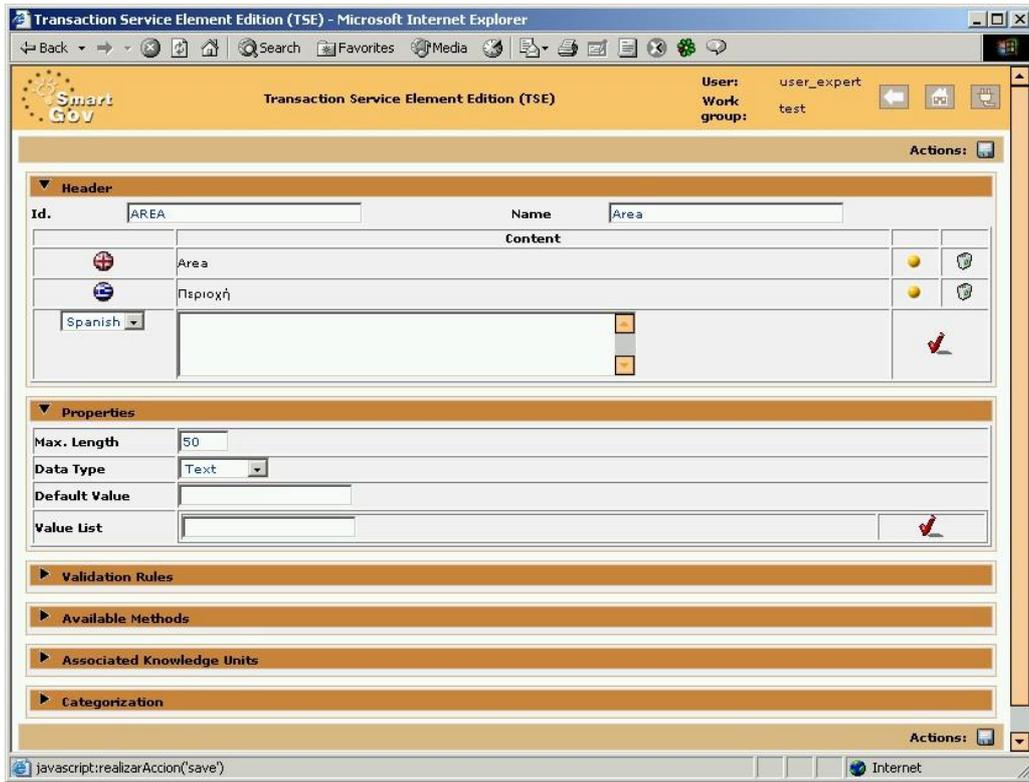


Figure 11 – Creating the “Area” TSE

9. Create a new TSE named “City”, which represents the city of the address. Fill in the fields at the *Transaction Service Elements Edition (TSE)* window with the following data:

Field name	Field value
Id	CITY
Name	City
Content (for English)	City
Content (for Greek)	Πόλη
Max Length	50
Data Type	Text

Press *Save* to save the TSE and close the window.

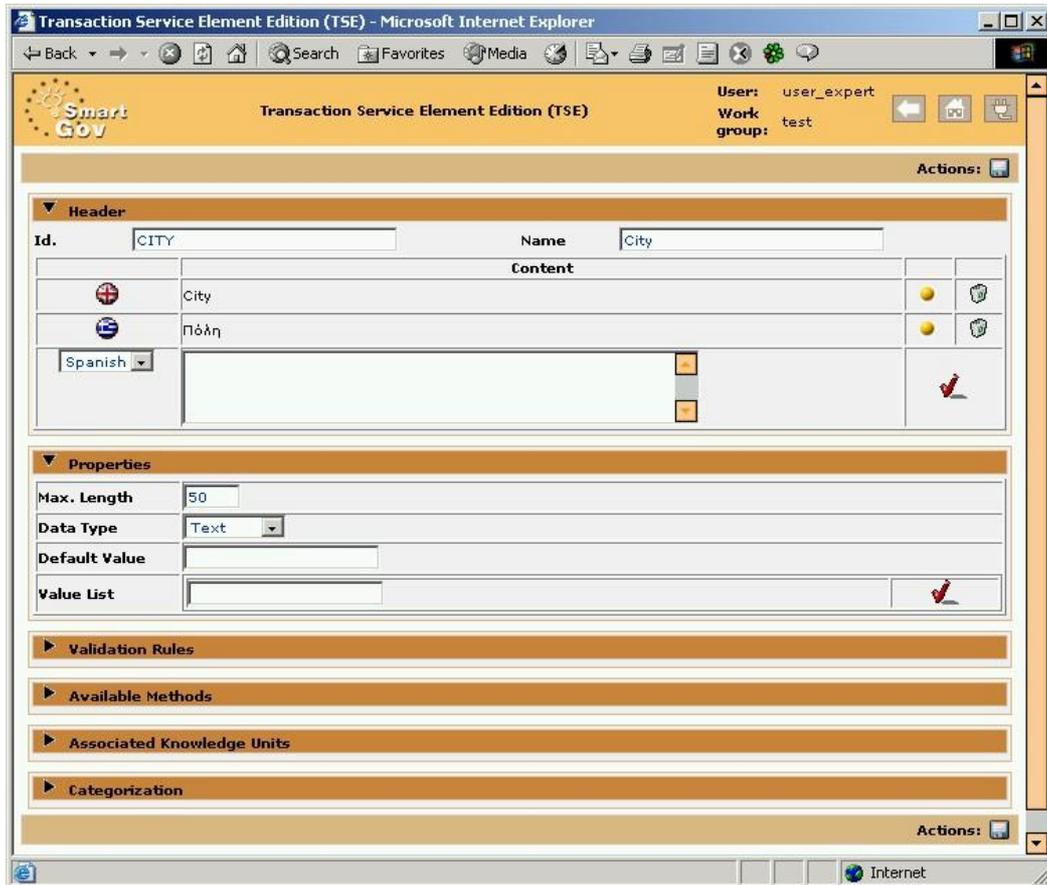


Figure 12 – Creating the “City” TSE

10. Create a new TSE named “Country”, which represents the country of the address. Fill in the fields at the *Transaction Service Elements Edition (TSE)* window with the following data:

Field name	Field value
Id	COUNTRY
Name	Country
Content (for English)	Country
Content (for Greek)	Χώρα
Max Length	50
Data Type	Text

Press *Save* to save the TSE and close the window.

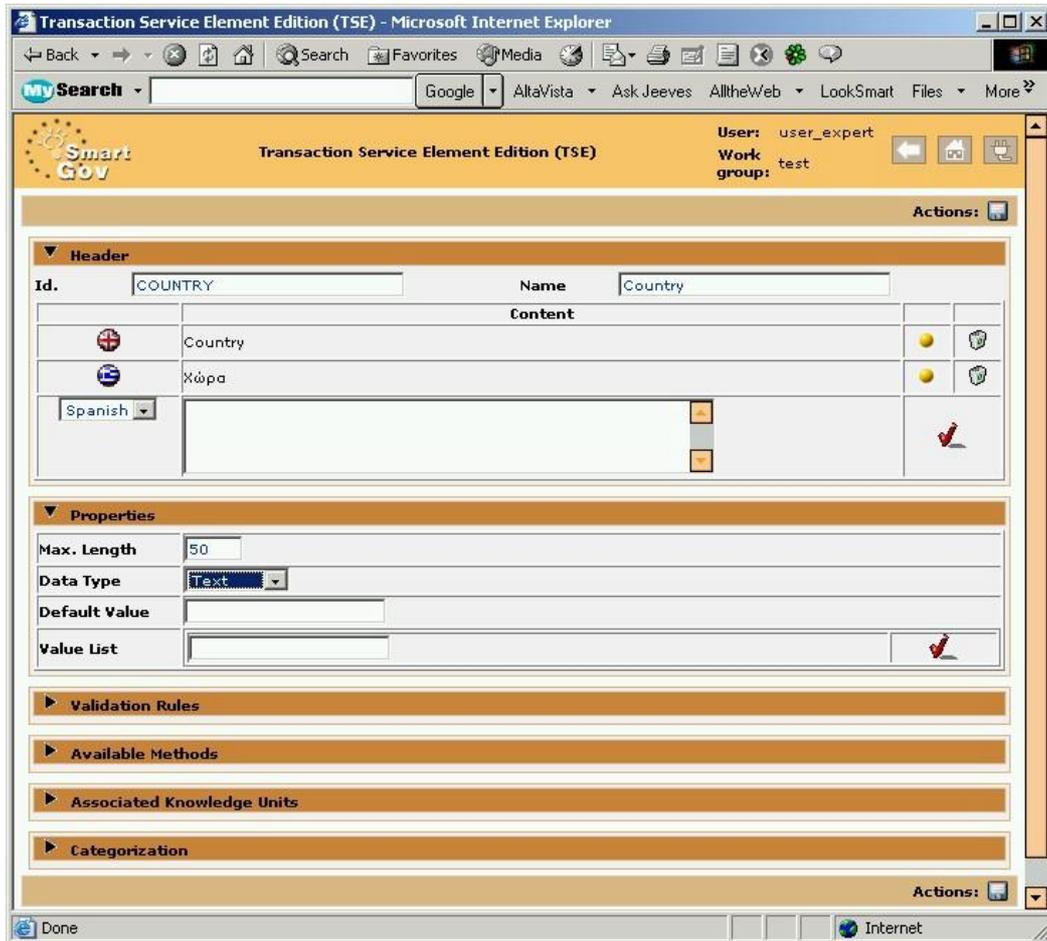


Figure 13 – Creating the “Country” TSE

4.2 Viewing the TSEs for the TSE group

1. In the main window of the SmartGov environment click the *TSE Editor* link. You can now view the TSEs you have just created in the column *Last TSEs* of the application window. The *name*, the *creation date* and the *description* of each TSE are displayed. If you wish to view all the data for a specific TSE, click on the appropriate TSE name. The last TSE created appears first. Notice that only the 5 last created TSEs are displayed. Click the *Next* link to view the rest of the TSEs you have created.

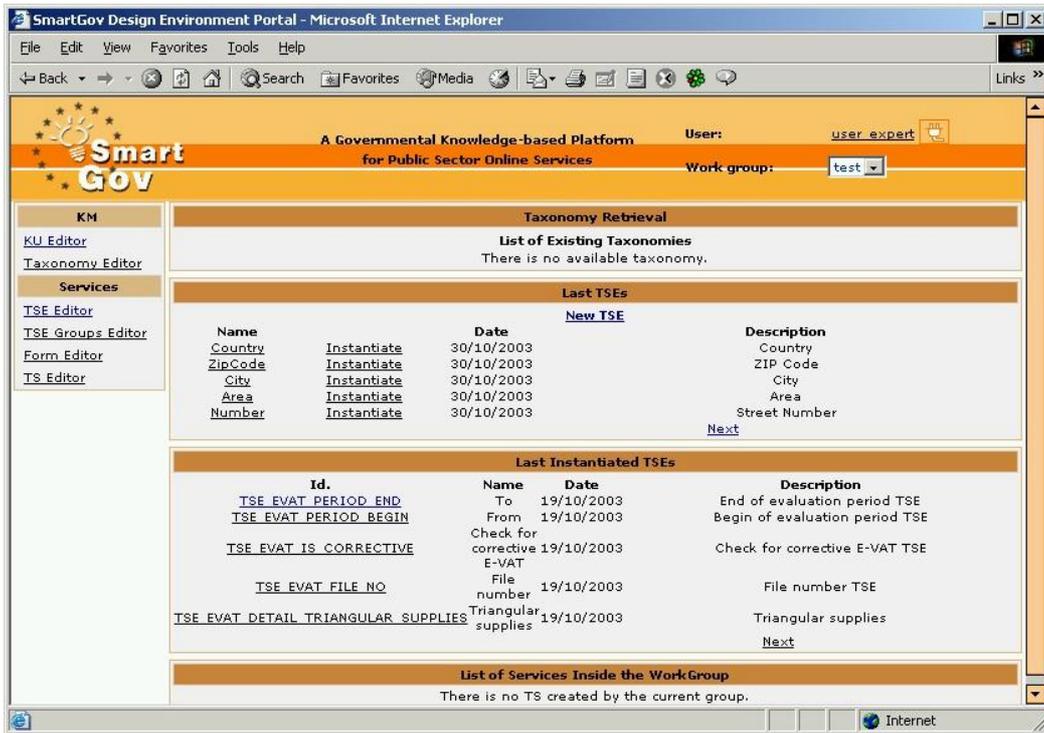


Figure 14 – Viewing the created TSEs

- The TSE named *Street* is now displayed in the main column of *Last TSEs*. Click the *Prev* link to return to the previous page.

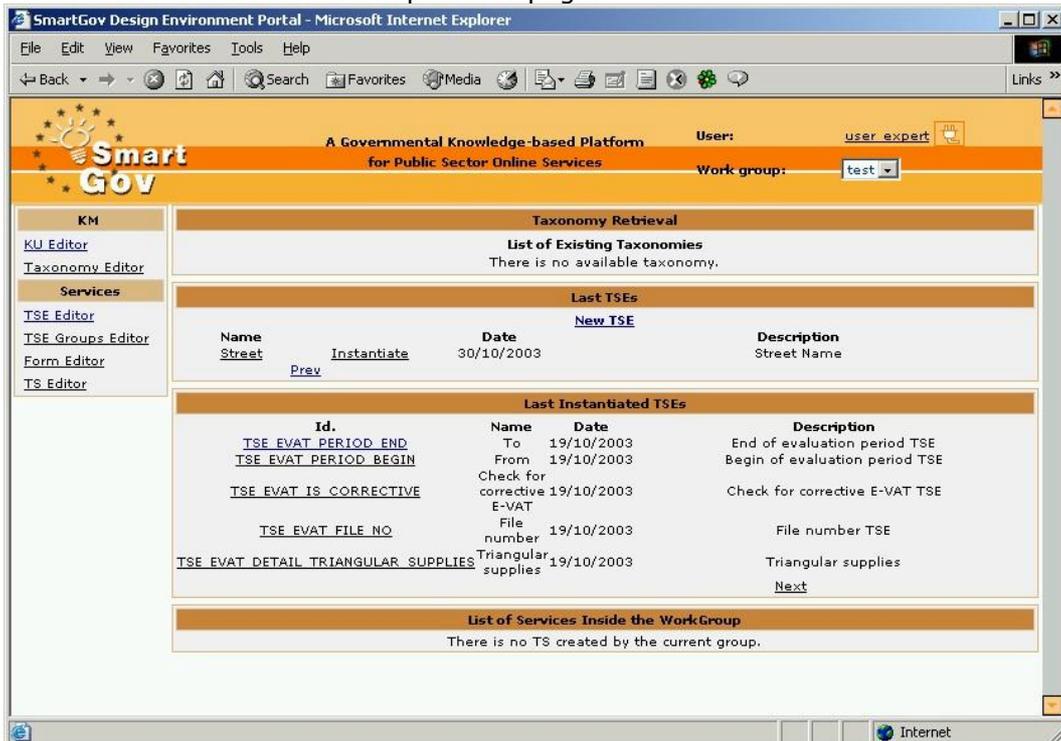


Figure 15 – Second page of created TSEs

Note: Notice that next to the name of each TSE an “Instantiate” link appears. This link *instantiates* the TSE, so it can be used in a specific service. So far, 6 generic TSEs have been created; these have to be first instantiated in order to be added to the form of your service. This procedure will be illustrated later in this chapter (section 4.4).

4.3 Creating the remaining TSEs

1. Create a new TSE named “FirstName”, which represents the first name of the user, following the procedure described in section 4.1. Fill in the fields at the *Transaction Service Elements Edition (TSE)* window with the following data:

Field name	Field value
Id	FIRST_NAME
Name	FirstName
Content (for English)	First Name
Content (for Greek)	Όνομα
Max Length	100
Data Type	Text

Press **Save** to save the TSE and close the window.

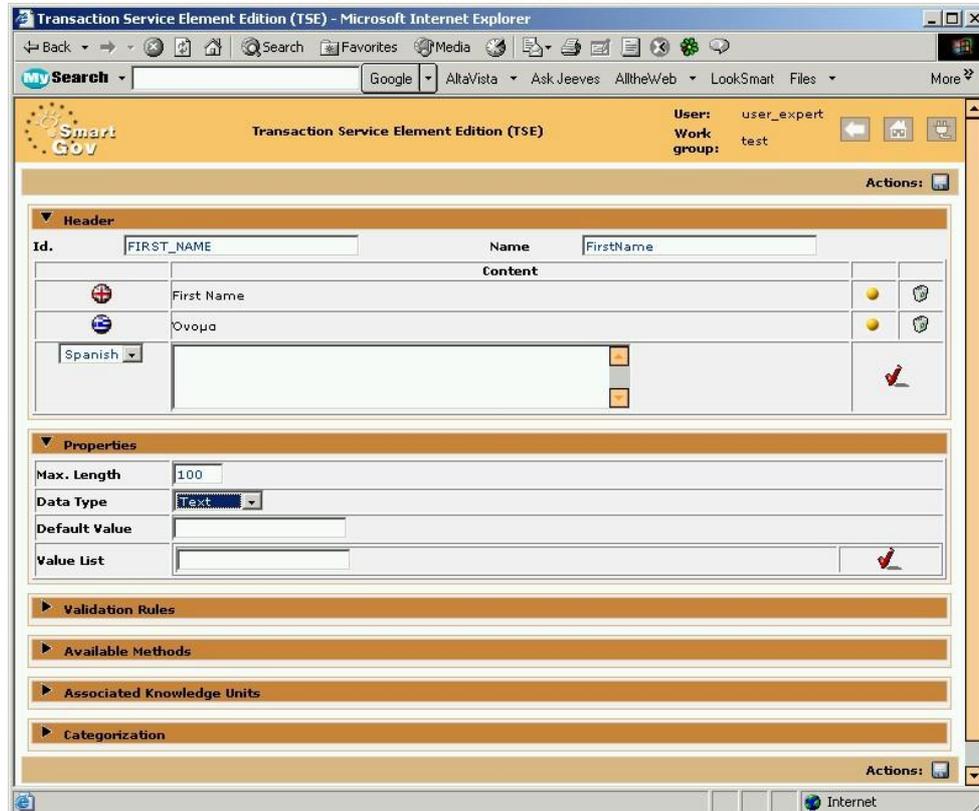


Figure 16 – Creating the “First name” TSE

2. Create a new TSE named “LastName”, which represents the last name of the user. Fill in the fields at the *Transaction Service Elements Edition (TSE)* window with the following data:

Field name	Field value
Id	LAST_NAME
Name	LastName
Content (for English)	Last Name
Content (for Greek)	Επώνυμο
Max Length	100
Data Type	Text

Press *Save* to save the TSE and close the window.

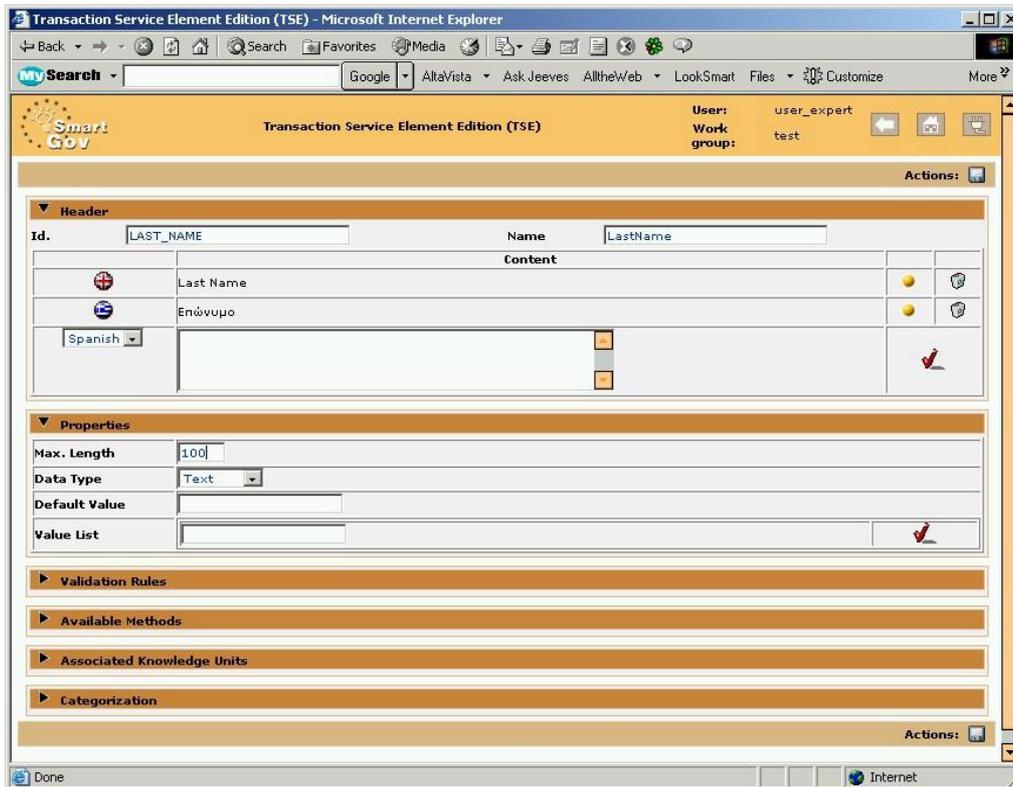


Figure 17 - Creating the "Last name" TSE

3. Create a new TSE named "TelNumber", which represents the telephone number of the user. Fill in the fields at the *Transaction Service Elements Edition (TSE)* window with the following data:

Field name	Field value
Id	TEL_NUM
Name	TelNumber
Content (for English)	Telephone Number
Content (for Greek)	Τηλέφωνο
Max Length	100
Data Type	Text

Press *Save* to save the TSE and close the window.

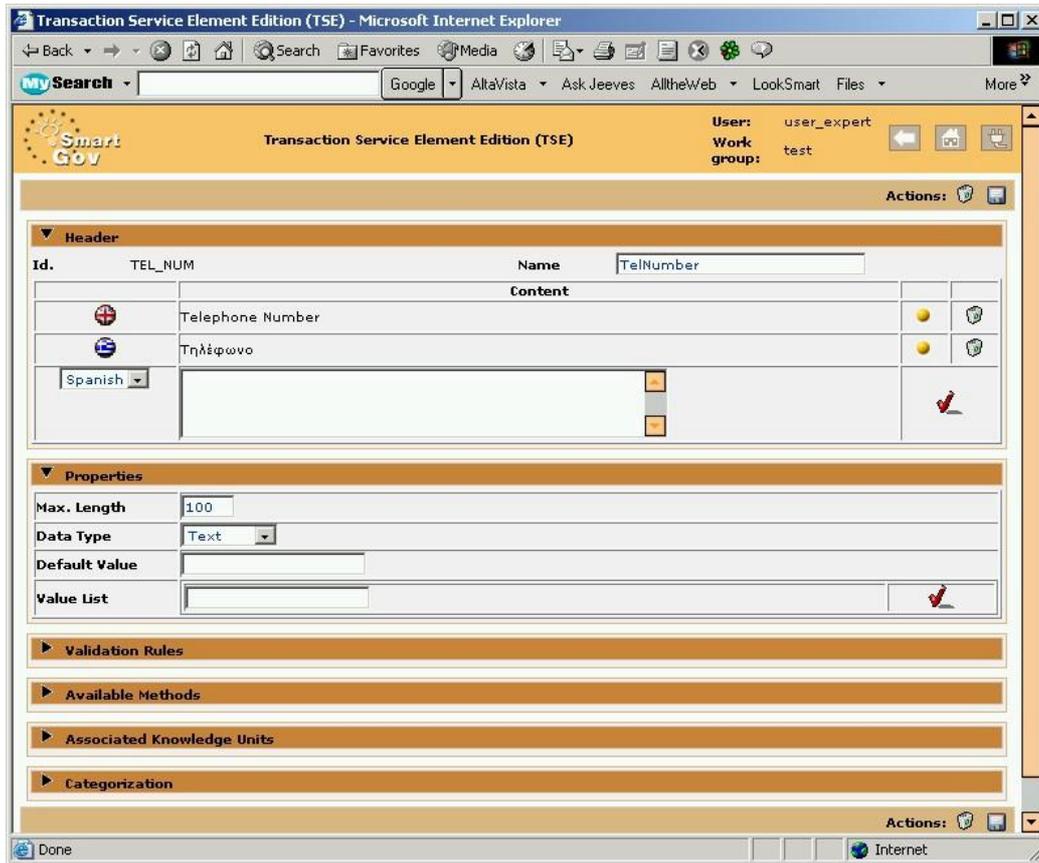


Figure 18 – Creating the “Telephone Number” TSE

4. Create a new TSE named “E-mail”, which represents the e-mail of the user. Fill in the fields at the *Transaction Service Elements Edition (TSE)* window with the following data:

Field name	Field value
Id	EMAIL
Name	E-mail
Content (for English)	E-mail
Content (for Greek)	Διεύθυνση ηλεκτρονικού ταχυδρομείου
Max Length	100
Data Type	Text

Press Save to save the TSE and close the window.

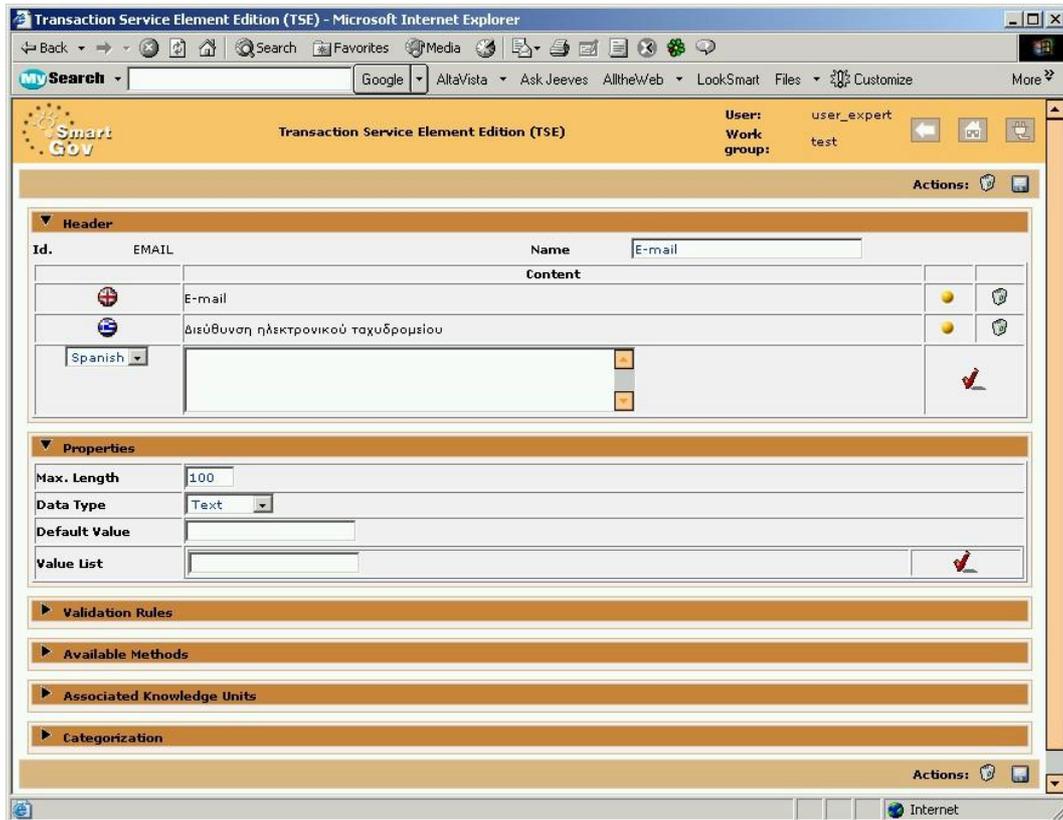


Figure 19 – Creating the “e-mail” TSE

5. Create a new TSE named “UserName”, which represents the username of the user. Fill in the fields at the *Transaction Service Elements Edition (TSE)* window with the following data:

Field name	Field value
Id	USERNAME
Name	UserName
Content (for English)	Username
Content (for Greek)	Όνομα χρήστη
Max Length	15
Data Type	Text

Press Save to save the TSE and close the window.

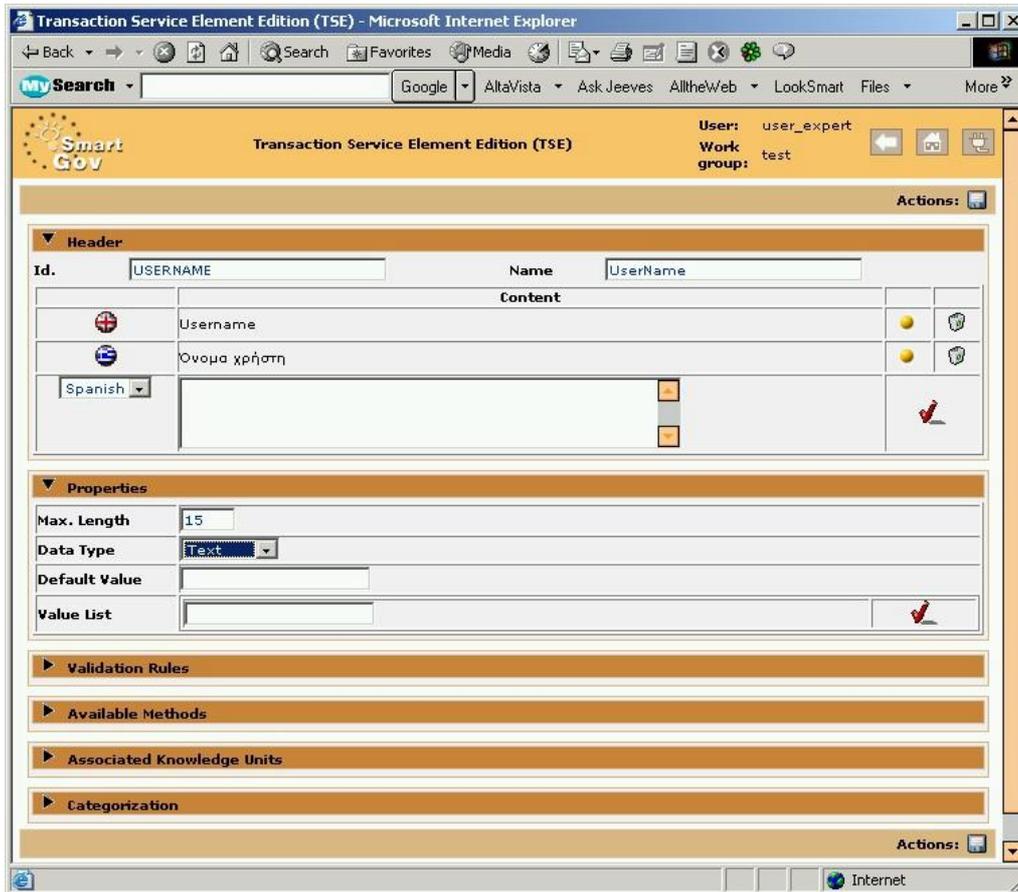


Figure 20 – Creating the “User name” TSE

4.4 Instantiate the TSEs

So far, 11 generic TSEs have been created. Generic TSEs are *templates* of elements and cannot be directly used in services. In order to place TSEs on forms (effectively, using them in services), they have to be first *instantiated*. The TSE instantiation procedure is carried out as follows:

1. In the main window of the SmartGov Application click the *TSE Editor* link. You can view the (generic) TSEs you have created in the column *Last TSEs*. Next to the name of each TSE an *Instantiate* link appears (see Figure 21). Click the *Instantiate* link next to the name of “UserName” TSE.

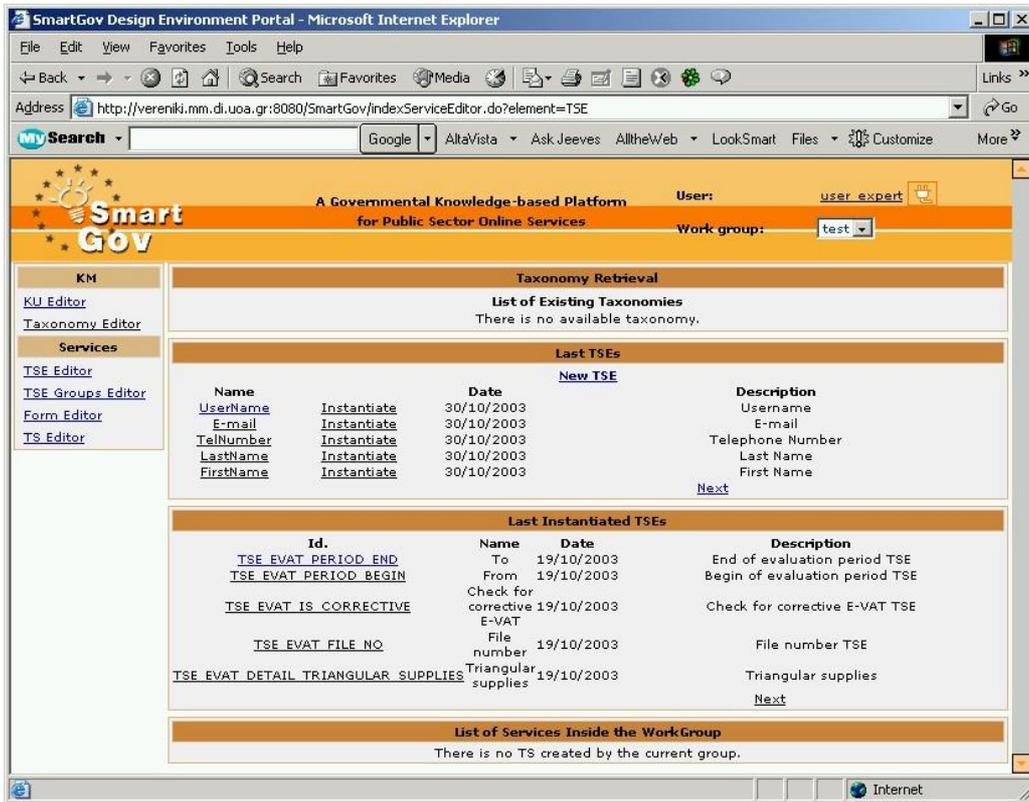


Figure 21 - TSE instantiation links

2. A new window named *Transaction Service Element Edition (TSE)* opens. The instantiated TSE is automatically assigned an id, which is derived from the name of the corresponding generic TSE, by appending to it a serial number. Some properties are copied from the generic TSE, but a few extra properties should be defined in order to fully configure the instantiated TSE. Click the *True* radio button in the *Single Value* option in order to define that the TSE is *Text* with a single value (not a list). Click the remaining radio buttons as shown below. Click the disk icon to save the instantiated TSE and close the window.

Field	Value
Single Select	True
Is ReadOnly	False
Is Visible	False ³
Is Mandatory	True

³ The value of the "is visible" radio is set only for documentation purposes; TSE visibility is controlled through the visual design of the form.

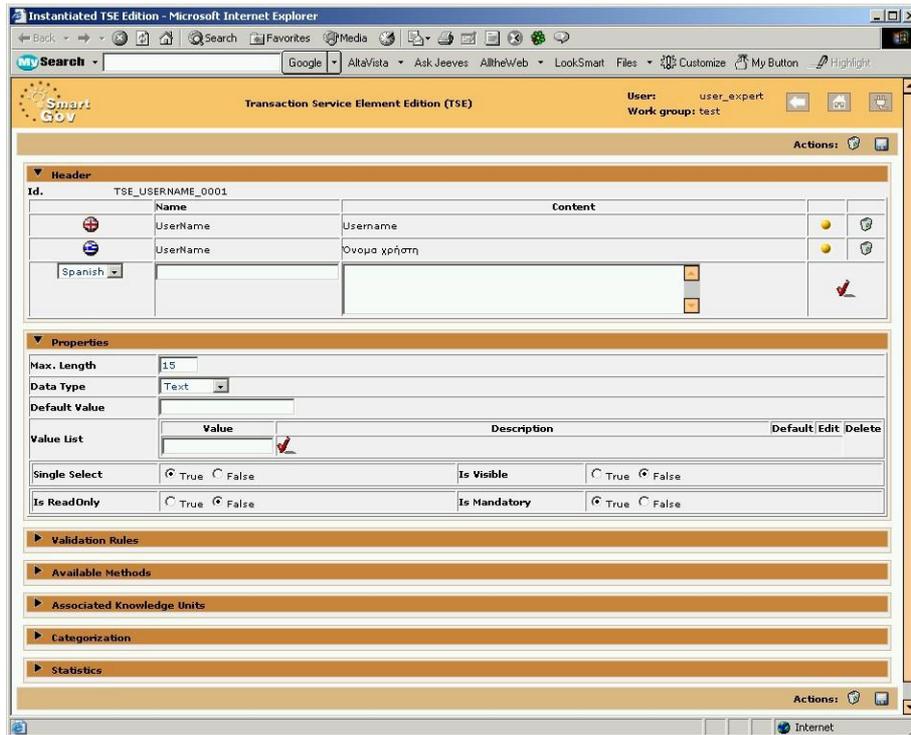


Figure 22 - Setting properties for the instantiated "Username" TSE

20. Repeat the steps 18 and 19 for each of the remaining 10 generic TSEs that you have created. You can see some of them in the *TSE Editor Instantiated TSE* list (Figure 23). To view the remaining instantiated TSEs use the *Next* link.

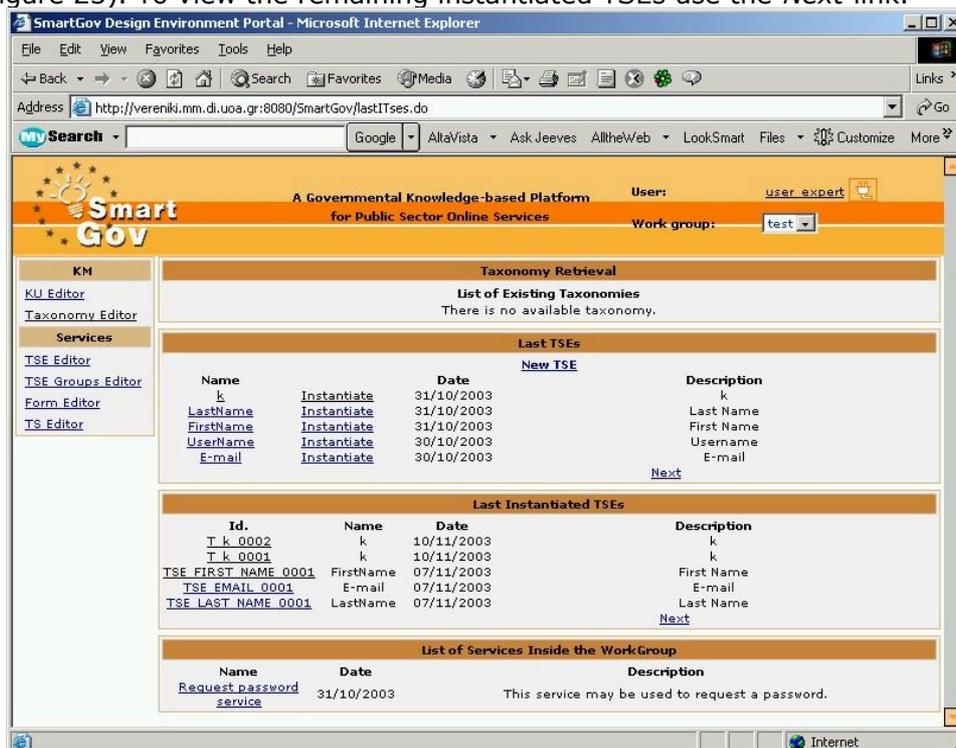


Figure 23 - TSE Editor with populated "Last Instantiated TSEs" zone

5 Creating the TSE Group

TSE group management (creation, editing, deletion) is performed through the *TSE Groups Editor*, which is invoked by clicking the *TSE Groups Editor* link within the left column menu. In order to create the TSE group in our example (a TSE group representing a citizen's address), you can perform the following steps:

1. Click the *TSE Group Editor* link in order to create the generic TSE Group. The following screen appears. The main area shows the *Last TSE Groups* zone, which at the moment has "no available TSE Group" listed, and the *Last Instantiated TSE Group* zone, where some instantiated TSE Groups from other services appear. Click the *New TSE Group* link in the *Last TSE Groups* zone.

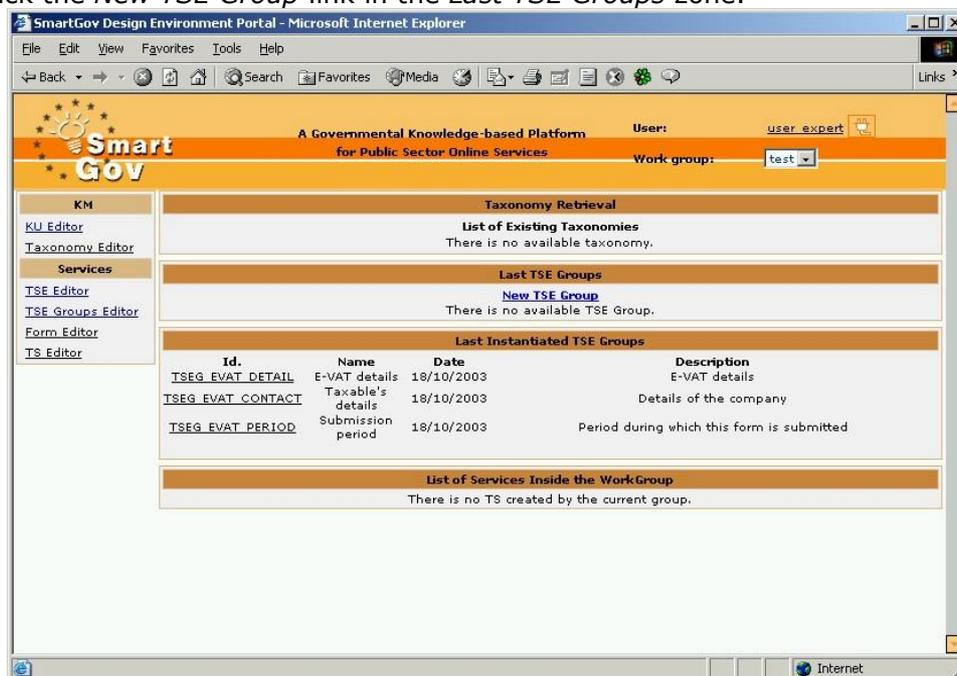


Figure 24 – The TSE Groups Editor

11. A new window named *Service elements group edition (TSE Group)* opens as shown below (Figure 25). All the options and the information needed to create a TSE Group can be entered through this page. You can click the arrows on the left side of each orange row to unfold it, revealing options within the specific section. The *Header* data is visible when the window opens, because it is mandatory for the TSE Group creation. Fill in the fields with the appropriate data. You have to provide an *Id* and a *name* for the TSE Group you create in a single language, whereas the *content* of the TSE Group is multilingual. It is recommended that in the "content" field, the text that will be presented to the end users be entered. In order to enter this text, a language from the drop down menu should be firstly selected; afterwards, the content should be typed in the corresponding field. Finally, click on the red tick (Add) on the right side of the Content field in order to add the content in the specific language. For this TSE Group provide the following data:

Field name	Field value
Id	ADDRESS_DATA
Name	Address Data
Content (for English)	Address
Content (for Greek)	Διεύθυνση

- Click on the arrow next to the link *Included Elements* to unfold this section. Since we are working with a new TSE group, no TSEs are currently associated with it. A link *Associate TSE* is visible. Click on this link.

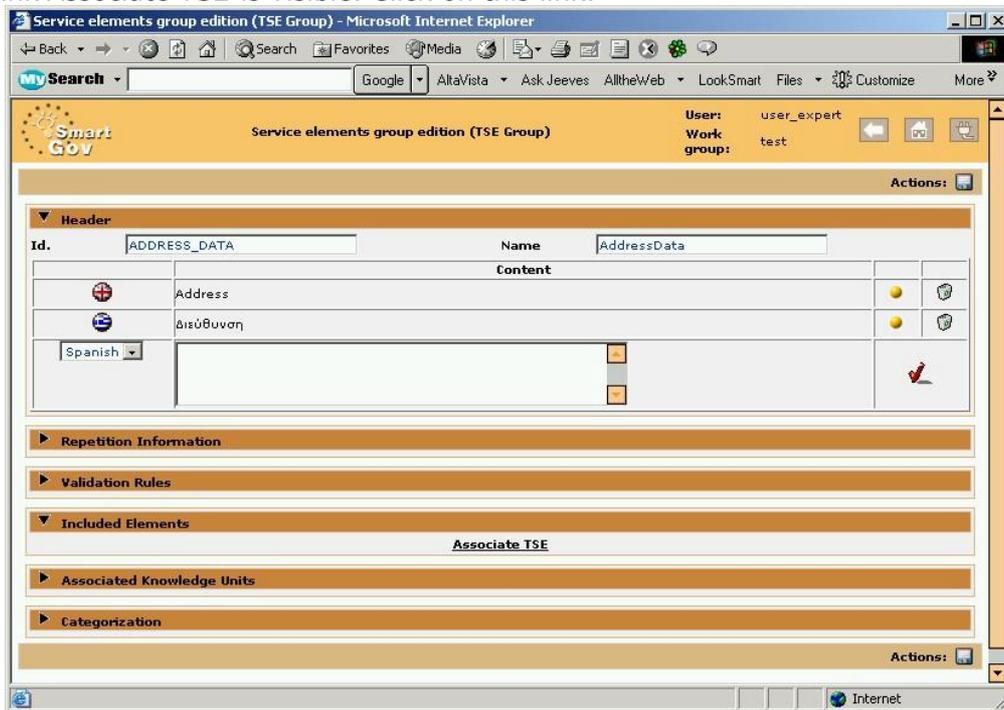


Figure 25 – Editing TSE groups

- A new window named *Select TSEs* opens (Figure 26). This window contains a list of all the available TSEs, which may be included to the TSE Group. Click on the selection boxes in the *Name* column to select the TSEs to be included to the group. For this group select the following TSEs:
 - Country,
 - Zip Code,
 - Area
 - City
 - Street Number
 - Street Name.

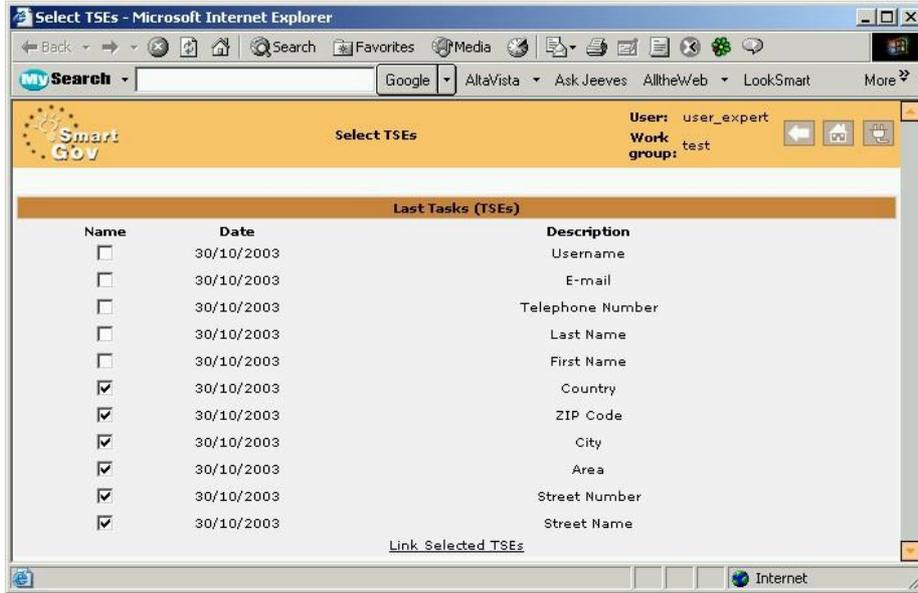


Figure 26 – “Select TSEs” window

4. When you select all the TSEs click *Link Selected TSEs*. This window closes and in the *Service elements group edition (TSE Group)* window you can see the TSEs you selected in the *Included Elements* area (Figure 27).
5. Press *Save* to save the TSE group information.

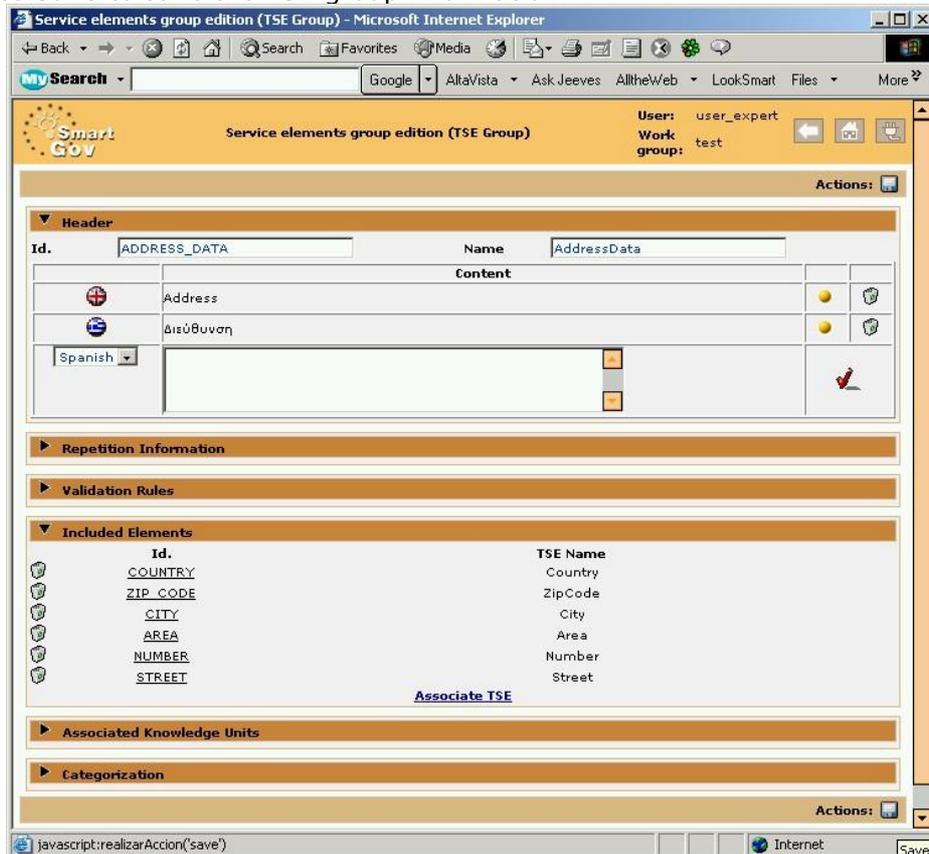


Figure 27 – Included elements in the TSE group

5.1 Instantiating the TSE Group

So far, one generic TSE Group has been created. Similarly to generic TSEs, generic TSE groups are *templates* of element groups and cannot be used directly in services. In order to use TSE groups in services, they have to be first *instantiated*. The TSE group instantiation procedure is carried out as follows:

1. In the left-hand side menu of the SmartGov Application click the *TSE Group Editor* link. This brings up the TSE group editor, where you can view the TSE Group you have created in the zone *Last TSE Groups* (Figure 28). Click the *Instantiate* link that appears next to the name of the *AddressData* TSE Group.

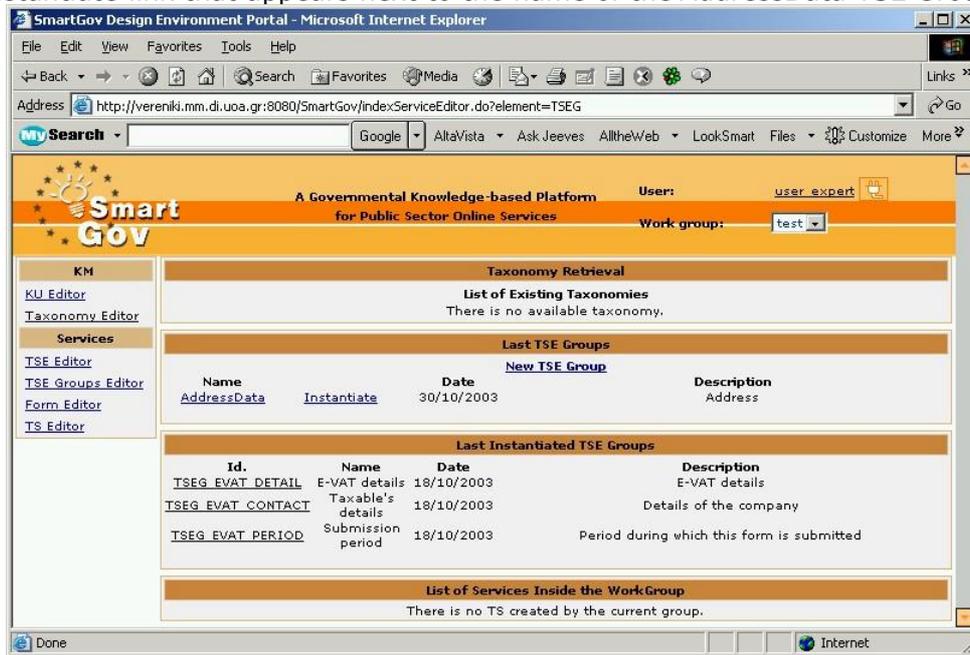


Figure 28 – Instantiating the TSE group

2. A new window named *Editing a TSE Group* opens (Figure 29). The instantiated TSE Group automatically has an id that is derived from the name of the corresponding generic TSE Group, by appending a serial number to it. Click the disk icon to save the instantiated TSE Group and close the window.

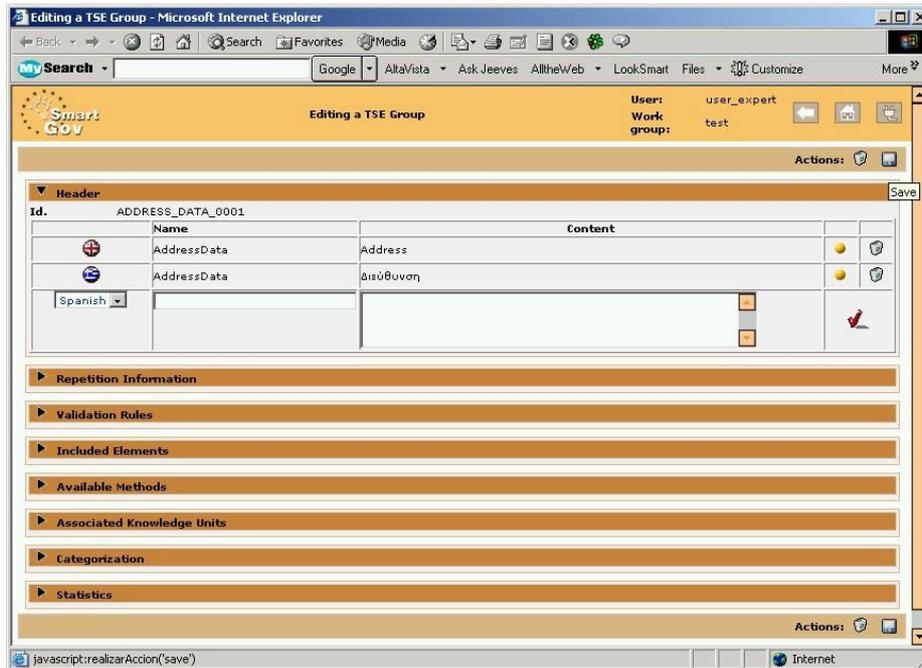


Figure 29 – Instantiated TSE group editing window

- In the main window of the SmartGov Application at the *Last Instantiated TSE Groups* zone you can view the TSE Group that you just instantiated (Figure 30). The id, name, creation date and description of each instantiated TSE Group are displayed.

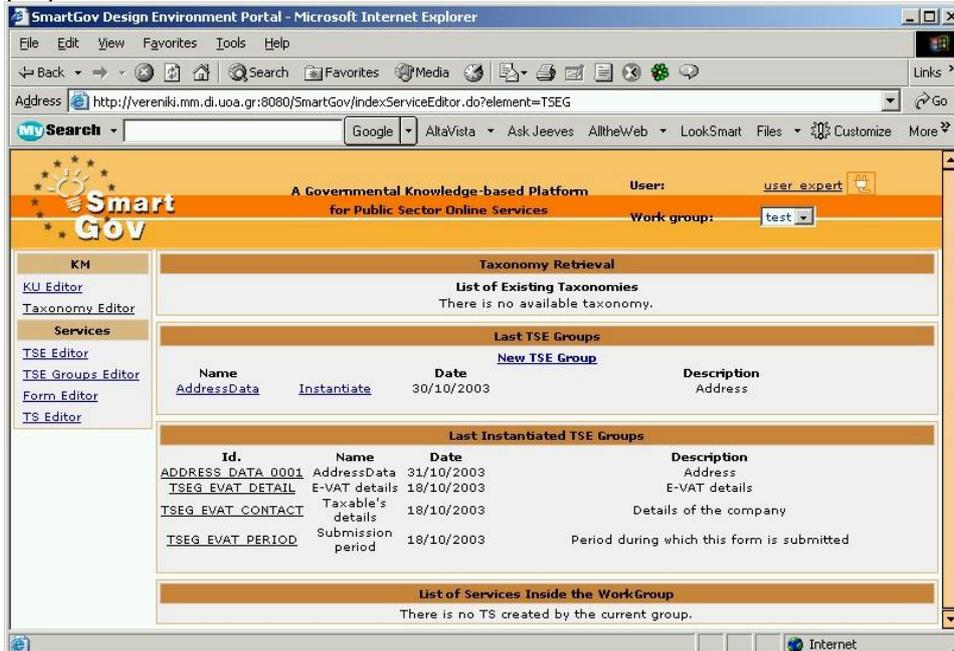


Figure 30 – Viewing the instantiated TSE group in the TSE group editor

- TSE group instantiation is now complete. The instantiated TSE group can now be used in the forms your service. The steps to do this are described in chapter 7.

6 Creating the Knowledge Units

The Knowledge Units (KUs), have various uses in the SmartGov platform. They may be used as documentation text for service developers, help for end-users, best practices for SmartGov platform stakeholders etc. Adding Knowledge Units to the elements of your services enhances their understandability and re-usability by other developers and the usability of the service by the end users. In order to create KUs and attach them to other SmartGov platform entities (TSEs, TSE groups, forms etc), the following procedure can be performed:

1. Click the *KU Editor* link in the left hand-side menu of the SmartGov application in order to bring up the KU editor window. The screen illustrated in Figure 31 appears. The main area shows the *Last Tasks (KUs)*, where existing KUs (from other services or bundled with the platform) appear. Click the *New KU* link in the *Last Tasks (KUs)* zone.

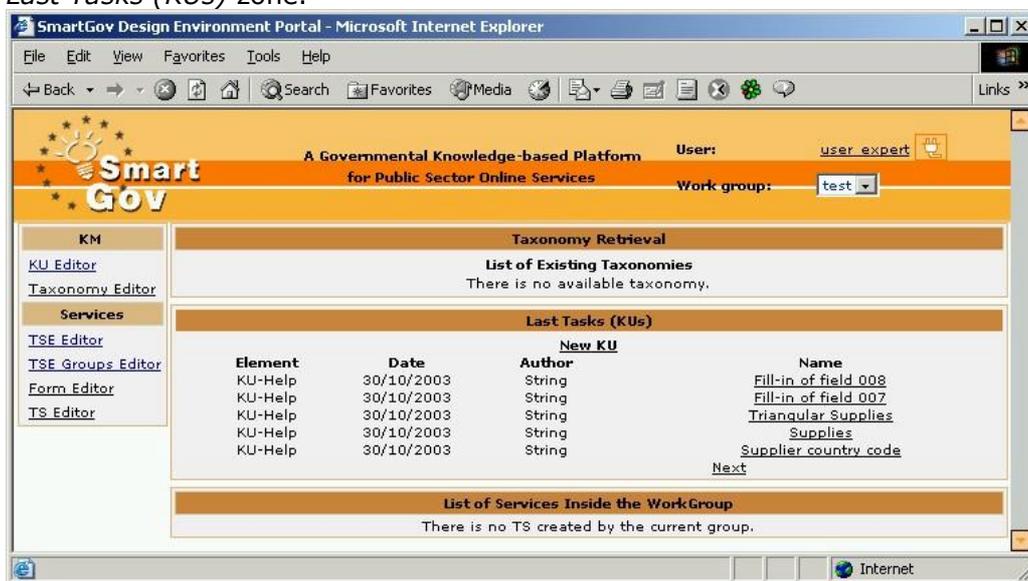


Figure 31 – KU editor

2. A new window named *Knowledge Unit Edition* opens as shown in Figure 32. All the options and the information needed to create a KU can be entered through this page. You can click the arrows at the left side of each orange row to unfold it, allowing access to specific properties. The Header data is unfolded when the window opens, because it is mandatory for the KU creation. Fill in the fields with the appropriate data. You have to provide an Id and a type for the KU you create. The type indicates the use of KU, i.e. whether it is a piece of help text, an example etc. The name and the abstract of the KU are multilingual resources. It is recommended that in the “abstract” field, the text that will be presented to the end users be entered. In order to enter this text, a language from the drop down menu should be firstly selected; afterwards, the content should be typed in the corresponding field. Finally, click on the red tick (Add) on the right side of the Content field in order to add the content in the specific language. For this KU provide the following data:

Field name	Field value
Id	USERNAME_KU
Type	Help
Name (for Greek)	KU ονόματος χρήστη
Abstract (for Greek)	Βοήθεια συμπλήρωσης του πεδίου "Όνομα Χρήστη"
Name (for English)	Username KU
Abstract (for English)	Help for completing the "username" field

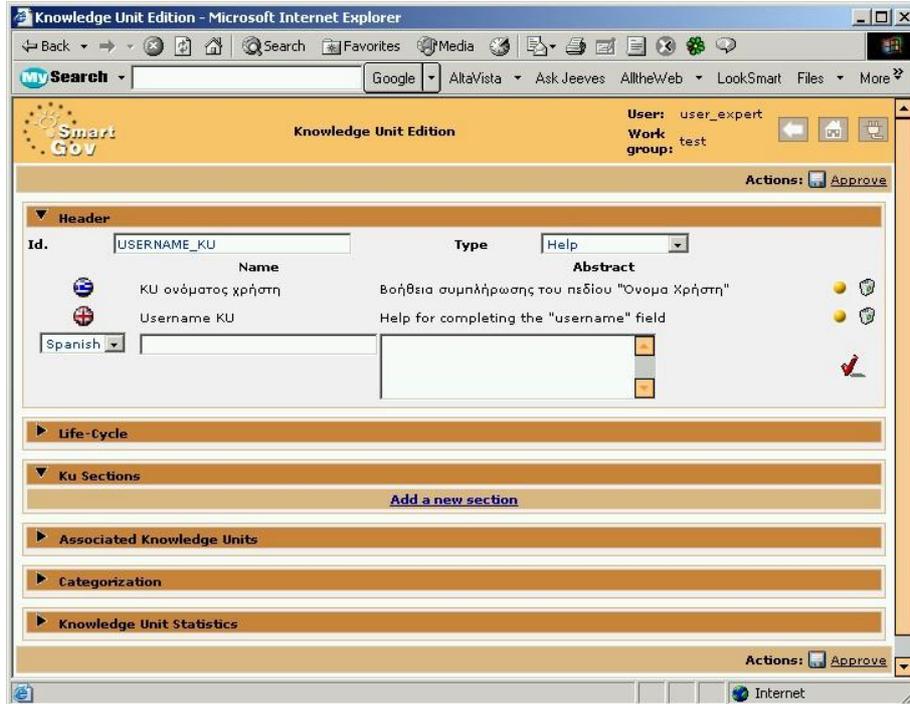


Figure 32 – Knowledge Unit Edition screen

- Click on the arrow next to the link *KU Sections*. KU sections store detailed information on the KU, and every KU should have at least one section. This is a new KU and no KU sections are currently associated with it. A link *Add a new section* is visible (Figure 33). Click on this link.

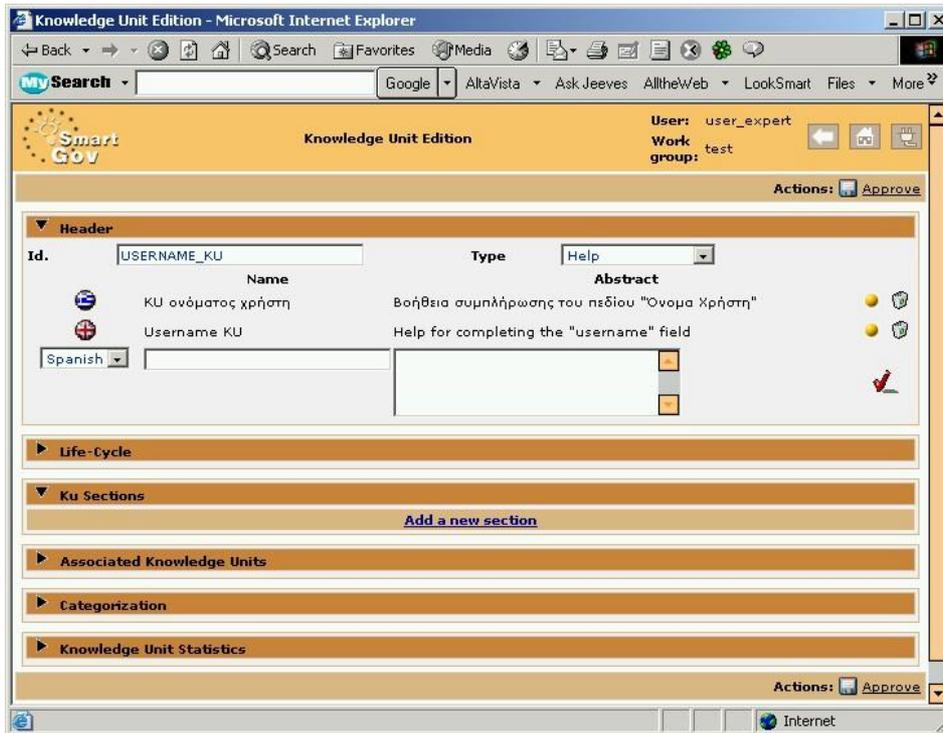


Figure 33 – Unfolding the “KU sections” zone

4. A new window named *Editing a section* opens (Figure 34). All the options and the information needed to add a KU section can be entered through this page. In the *Section Visibility* zone click the *Role list* radio button in order to specify to whom this KU section is addressed. A new list with all the available roles appears. Check the *End Users* checkbox to define that this KU section is addressed only to end-users. In the field box *Comments* enter some comments to help someone understand the purpose of the KU section. At the *Description* zone you define the *title* and the *content* of the KU section. The title and content will be displayed to the service end-user, so appropriate information should be entered. In order to enter this text (which is a multilingual resource), a language from the drop down menu should be firstly selected; afterwards, the content should be typed in the corresponding field. Finally, click on the red tick (Add) on the right side of the Content field in order to add the content in the specific language. For this KU section provide the following data:

Field name	Field value
Title (for English)	Username Help
Content (for English)	The username supplied should be easy to remember and should contain at least 5 characters.
Title (for Greek)	Βοήθεια για το όνομα χρήστη
Content (for Greek)	Το όνομα χρήστη θα πρέπει να είναι εύκολο να το θυμάστε και να περιέχει τουλάχιστον 5 χαρακτήρες.
Addressed to	End users
Comments	This is a KU addressed to the end users of the service

Press **Save** to save the KU section and close the window.

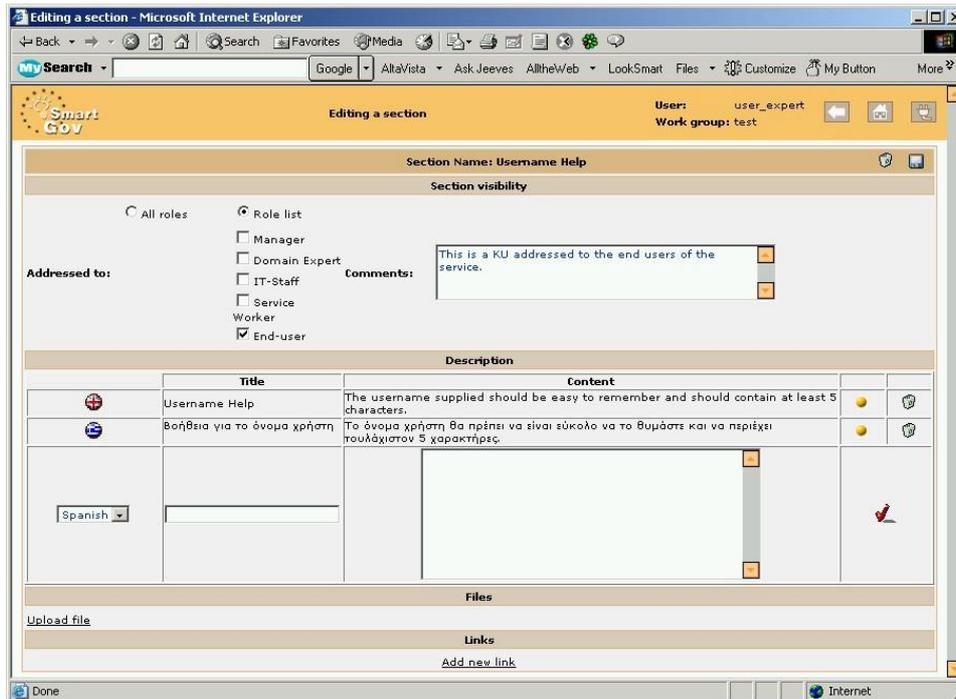


Figure 34 – Defining the section contents

5. The *Editing a selection* window closes and the *Knowledge Unit Edition* is brought up again (Figure 35). At the *KU Sections* section you can see the new section you just added. Click the disk icon to save this KU.

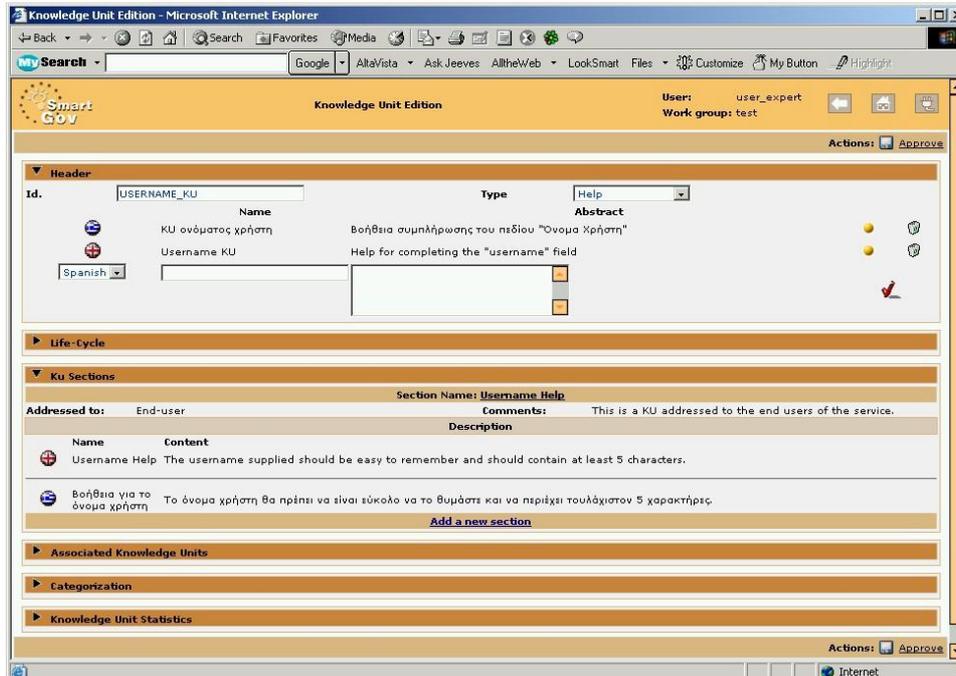


Figure 35 – "KU sections" zone with one section having been defined

6. The KU has now been saved, but its life-cycle has not yet been completed; since KUs contain important information, the SmartGov platform maintains information

regarding the activities performed on them (*Life-cycle* zone, see Figure 36) and provides a workflow procedure, requiring the *approval* of KU content. Once a KU is “approved”, its contents are finalised and cannot be edited. In order to *approve* a KU, click on the “Approve” link appearing besides the disk icon (Figure 37). Note that this link may or may not appear, depending on the access rights defined for each individual user by the SmartGov platform administrator.

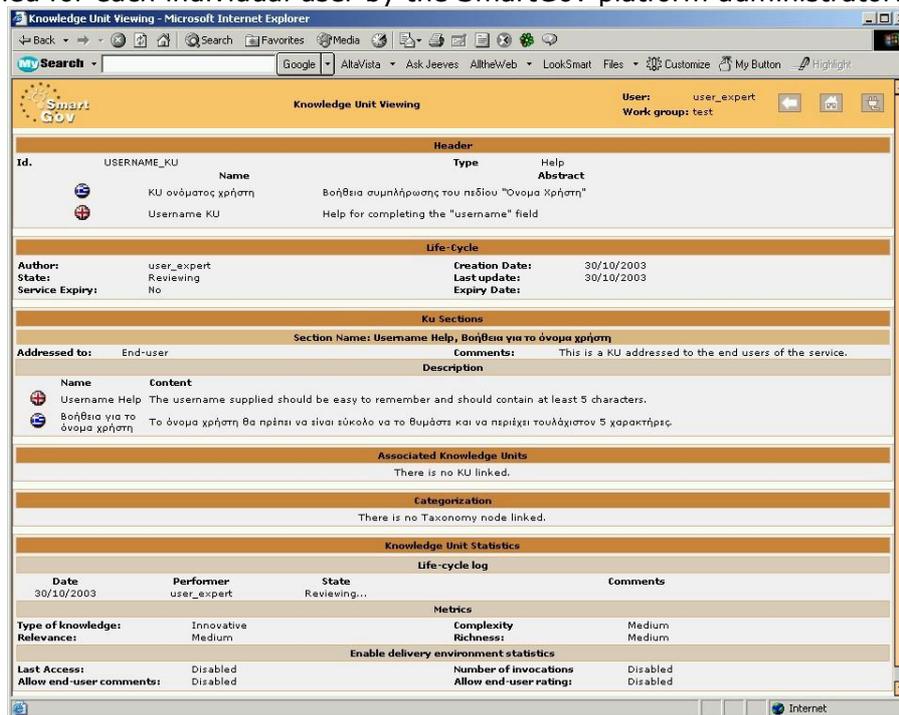


Figure 36 – Knowledge unit viewing with the “Life-cycle” zone unfolded

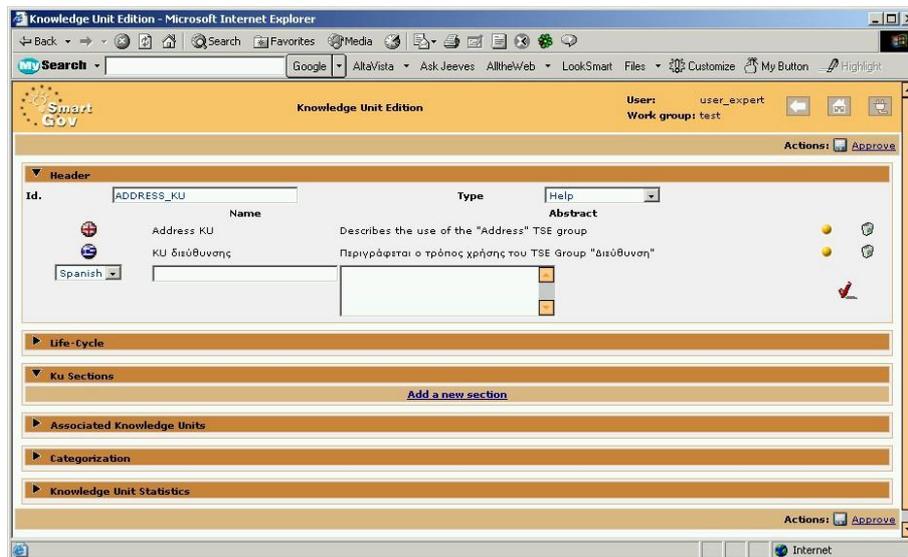


Figure 37 – “Approve” link for a KU

- Repeat the steps 1 to 3 to create a second KU regarding to address data. Fill in the fields at the *Knowledge Unit Edition* window with the following data:

Field name	Field value
Id	ADRESS_KU
Type	Help
Name (for English)	Address KU
Abstract (for English)	Describes the use of the "Address" TSE group
Name (for Greek)	KU διεύθυνσης
Abstract (for Greek)	Περιγράφεται ο τρόπος χρήσης του TSE Group "Διεύθυνση"

8. Click on the arrow next to the link *Ku Sections*. A link *Add a new section* is visible. Click on this link.
9. The *Editing a section* window opens (Figure 38). Create a new KU section with the following data:

Field name	Field value
Addressed to	Manager, Domain Expert, IT-Staff
Title (for English)	Address Use Description
Content (for English)	This TSE Group contains the address information, including street, number, ZIP code, area, city, country.
Title (for Greek)	Χρήση της διεύθυνσης
Content (for Greek)	Αυτό το TSE group περιλαμβάνει τα στοιχεία της διεύθυνσης, δηλαδή οδό, αριθμό, Τ.Κ., περιοχή, πόλη και χώρα.
Addressed to	Manager, Domain Expert, IT Staff

Press **Save** to save the KU section and close the window.

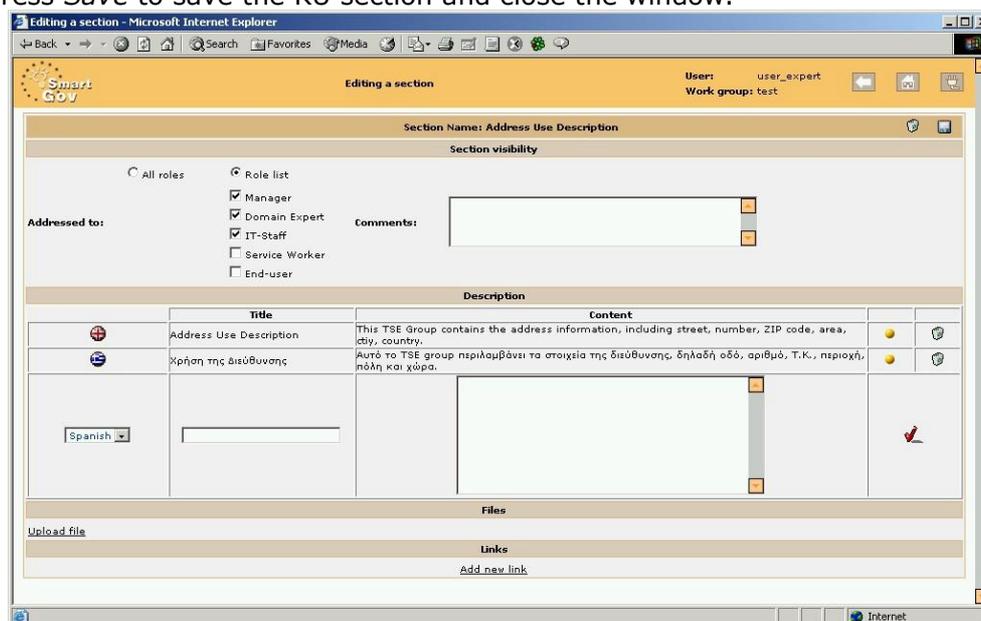


Figure 38 – Creating a section for the Address KU

10. The *Knowledge Unit Edition* window is now brought up. In the *KU Sections* zone the newly added section is displayed (Figure 39). Click the disk icon to save this KU.

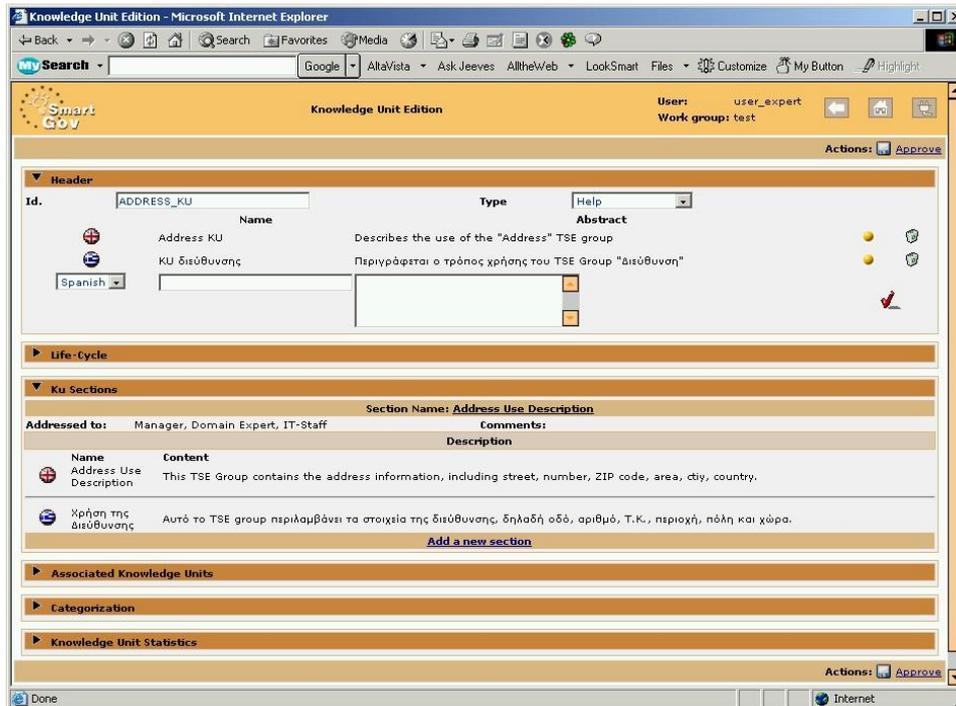


Figure 39 – The newly added section is displayed

11. The KU has been saved and the "Approve" link now appears next to the disk icon. Click the *Approve* link to finalise the contents of the KU. The KU editor switches to read-only mode; the *Life-Cycle* section unfolds displaying additional information about the author, the creation and expiration date of the KU (Figure 40). Close this window.

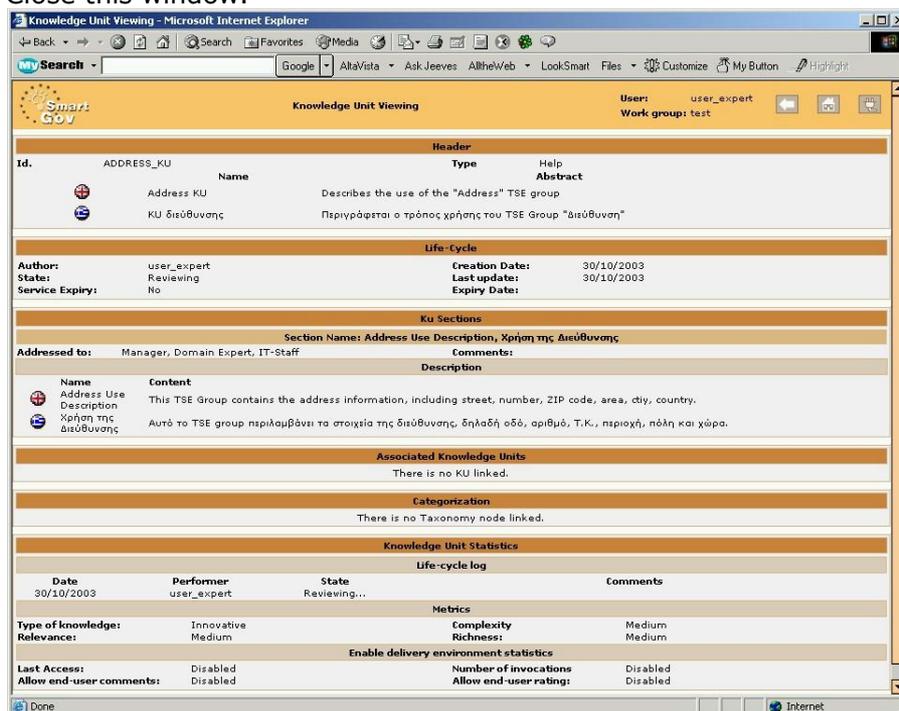


Figure 40 – Viewing the approved KU

12. Repeat the steps 1 to 3 to create a third KU regarding to address data. This KU is addressed to end-users. Fill in the fields at the *Knowledge Unit Edition* window with the following data:

Field name	Field value
Id	ADRESS_KU_FOR_END_USER
Type	Help
Name (for English)	Address Ku End User
Abstract (for English)	This KU is addressed to the end user. Explains the use of the address TSE group
Name (for Greek)	ΚΥ διεύθυνσης χρήστη
Abstract (for Greek)	Αυτό το ΚΥ απευθύνεται στους τελικούς χρήστες της υπηρεσίας και εξηγεί τη χρήση της διεύθυνσης.

Click on the arrow next to the link *Ku Sections*. A link *Add a new section* is visible (Figure 41). Click on this link.

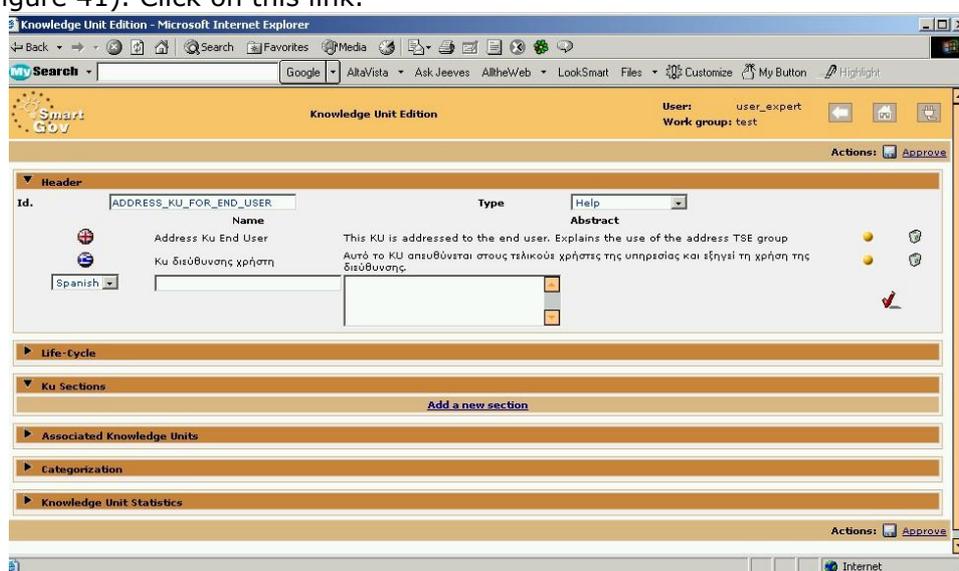


Figure 41 – A KU for the end-users

13. The *Editing a section* window opens (Figure 42). Create a new KU section with the following data:

Field name	Field value
Addressed to	Service Worker, End-user
Title (for English)	End User Help
Content (for English)	This is the address where you receive information leaflets.
Title (for Greek)	Βοήθεια σε χρήστη
Content (for Greek)	Αυτή είναι η διεύθυνση στην οποία θα σας αποστέλλονται ενημερωτικά φυλλάδια.
Addressed to	Service Worker, End-user

Press *Save* to save the KU section and close the window.

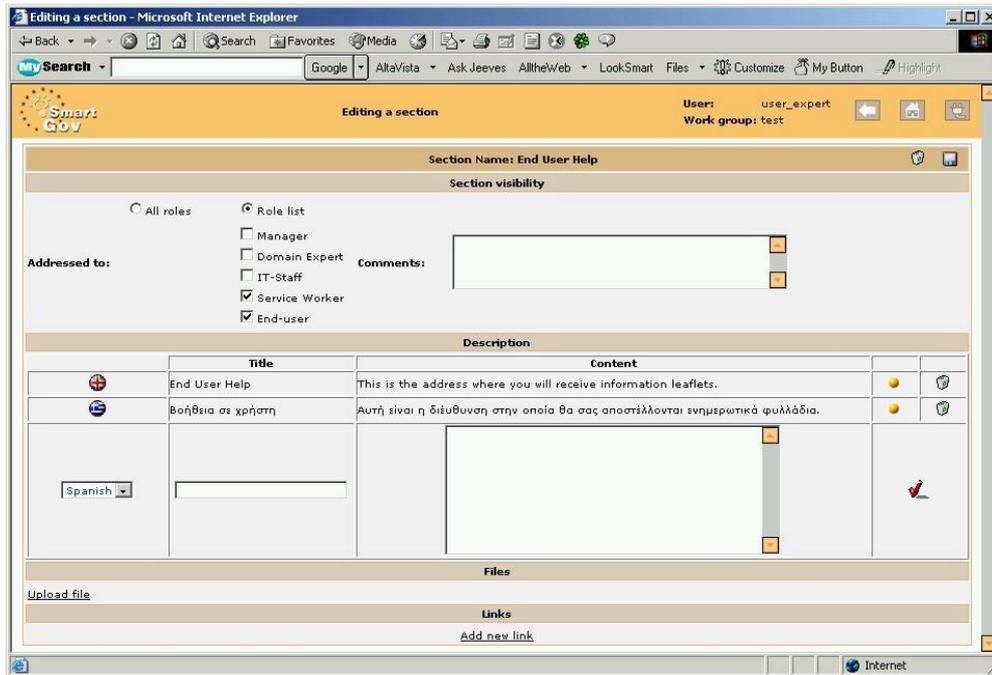


Figure 42 – Section contents for the KU

14. The *Knowledge Unit Edition* window is now brought up. In the *KU Sections* zone the newly added section is now visible (Figure 43). Click the disk icon to save this KU.

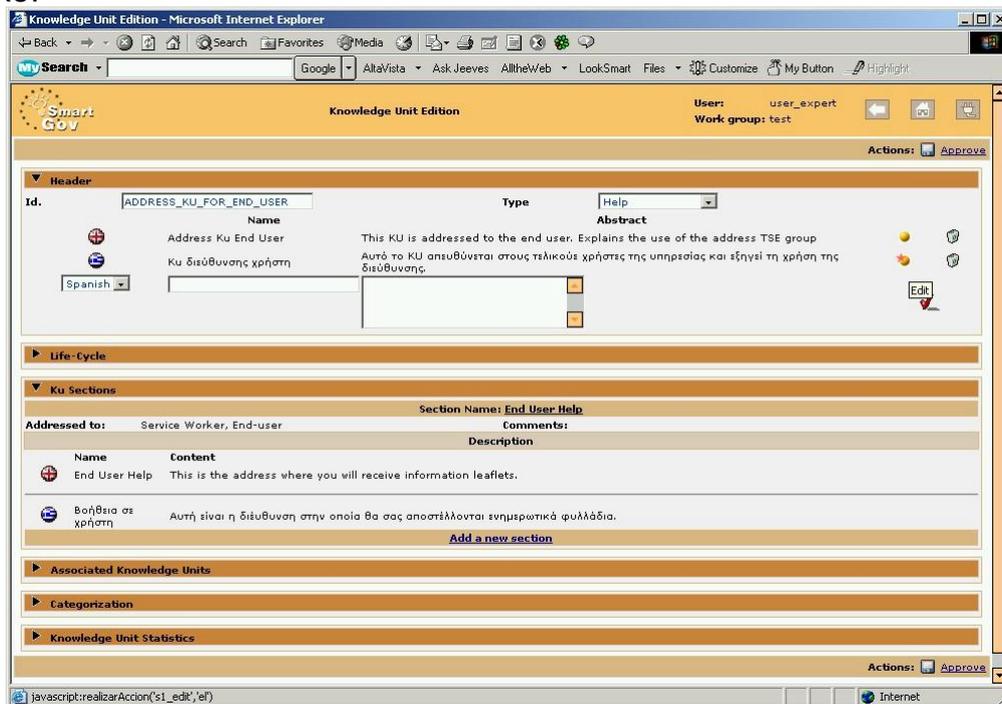


Figure 43 – The “KU sections” zone displaying the newly added section

15. The KU has been saved and the “Approve” link appears next to the disk icon. Click the *Approve* link to finalize this KU. The KU editor switches to read-only

mode; the *Life-Cycle* section is now unfolded, displaying additional information about the author, the creation and expiration date of the KU. Close this window.

The screenshot shows a web browser window titled "Knowledge Unit Viewing - Microsoft Internet Explorer". The page content is as follows:

Smart GOV Knowledge Unit Viewing User: user_expert Work group: test

Header			
Id.	ADDRESS_KU_FOR_END_USER	Name	Type Help Abstract
		Address Ku End User	This KU is addressed to the end user. Explains the use of the address TSE group
		Ku διεύθυνσης χρήστη	Αυτό το KU απευθύνεται στους τελικούς χρήστες της υπηρεσίας και εξηγεί τη χρήση της διεύθυνσης.

Life-Cycle

Author:	user_expert	Creation Date:	30/10/2003
State:	Reviewing	Last update:	30/10/2003
Service Expiry:	No	Expiry Date:	

Ku Sections

Section Name: End User Help, Βοήθεια σε χρήση

Addressed to: Service Worker, End-user

Comments:		Description
Name	Content	
End User Help	This is the address where you will receive information leaflets.	
Βοήθεια σε χρήση	Αυτή είναι η διεύθυνση στην οποία θα σας αποστέλλονται ενημερωτικά φυλλάδια.	

Associated Knowledge Units

There is no KU linked.

Categorization

There is no Taxonomy node linked.

Knowledge Unit Statistics

Life-cycle log

Date	Performer	State	Comments
30/10/2003	user_expert	Reviewing...	

Metrics

Type of knowledge:	Innovative	Complexity	Medium
Relevance:	Medium	Richness:	Medium

Enable delivery environment statistics

Last Access:	Disabled	Number of invocations	Disabled
Allow end-user comments:	Disabled	Allow end-user rating:	Disabled

Figure 44 – Viewing the finalised KU

7 Creating the Form

This chapter describes the procedure for creating the *semantic part* of the form for the Request Password service. The semantic part of the form includes the form description, elements (TSEs and TSE groups) that the form contains, knowledge units associated with the form, validation rules etc. A form has also a *visual part*, defining its appearance; the visual part of the form is discussed in chapter 9. The semantic part of the form is created through the following procedure:

1. Click the *Form Editor* link in the left hand-side menu of the SmartGov application in order to bring up the form editor. The screen depicted in Figure 45 appears. The main area shows the *Last Forms* zone, where forms that may have been created for other services appear. Click the *New Form* link in the *Last Forms* zone.

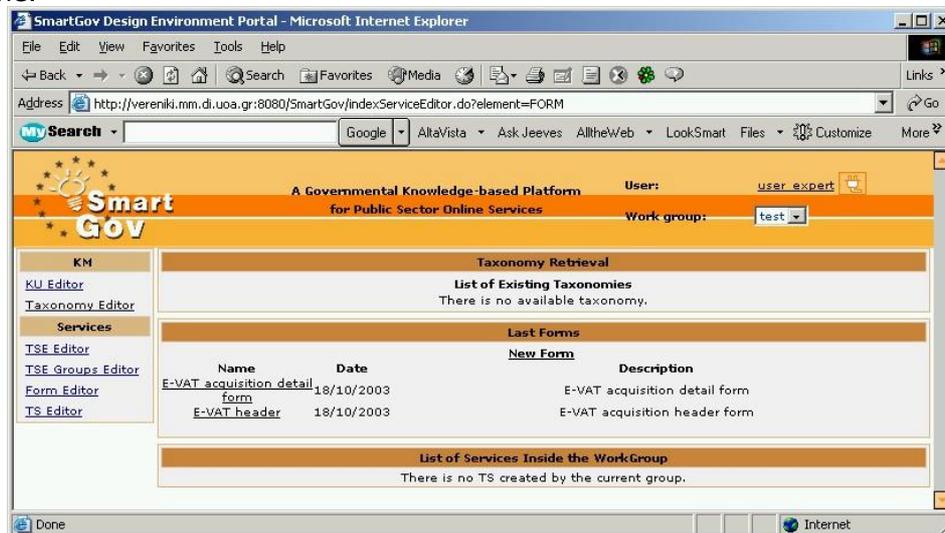


Figure 45 – Main “form editor” screen

2. All the options and the information needed to create the semantic part of a form can be entered through this page. You can click the arrows at the left side of each orange row to unfold it and access properties. The *Header* section is unfolded when the window opens, because it is mandatory for the form creation. Fill in the fields with the appropriate data. You have to provide an *Id* for the Form you create in one language, whereas the *name* and *description* of the Form are multilingual. In order to enter this text, a language from the drop down menu should be firstly selected; afterwards, the content should be typed in the corresponding field. Finally, click on the red tick (Add) on the right side of the Content field in order to add the content in the specific language. For this form provide the following data:

Field name	Field value
Id	REQUEST_PASSWORD_FORM
Name (for English)	Password Request Form
Name (for Greek)	Φόρμα αίτησης κωδικού
Description (for English)	This form may be used for the request of a password. The user provides his/her personal data and a username.
Description (for Greek)	Αυτή η φόρμα μπορεί να χρησιμοποιηθεί για την αίτηση κωδικού χρήστη (συνθηματικού). Ο χρήστης παρέχει τα προσωπικά του στοιχεία και το όνομα χρήστη.

3. Click on the arrow next to the *Included Elements* field to view the *Associate TSE* and *Associate TSE Group* links (Figure 46). Using these links you may attach TSE groups and TSEs to the form.

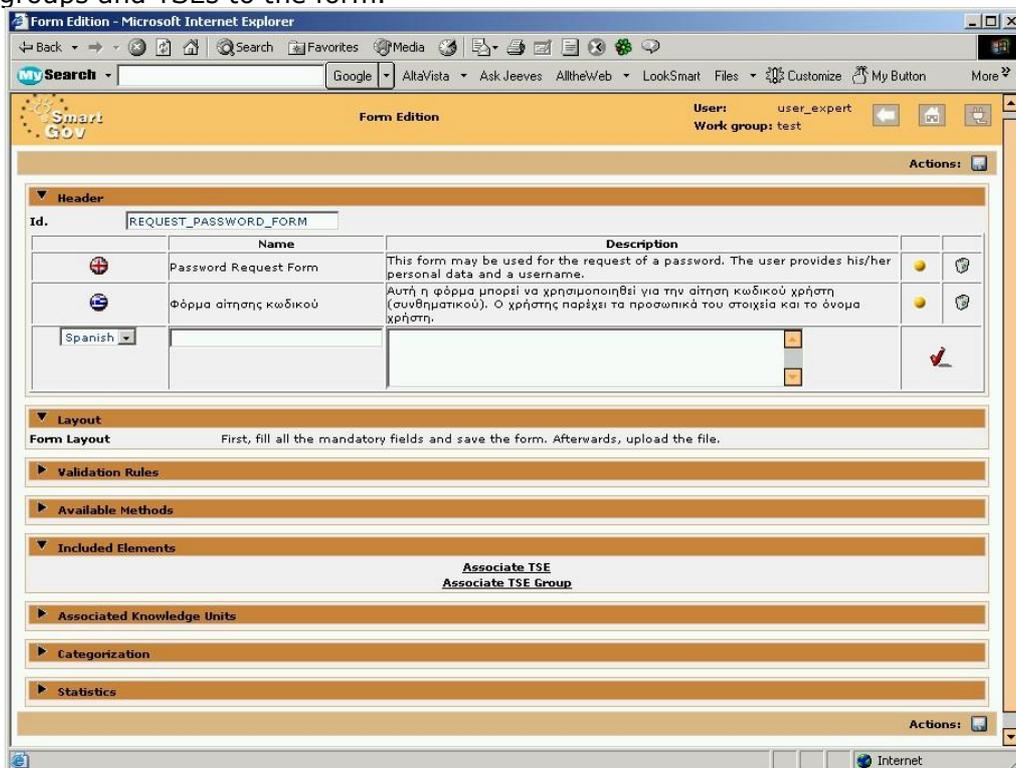


Figure 46 – Unfolding the “Included elements” section

Note: The *Form Layout* field is mandatory for the form to be used in the service as it defines the XHTML file with the form presentation information. The XHTML will be created using a separate tool, as described in chapter 9, “Creating the Visual Form Layout”. Once the XHTML has been created, it will be associated with the form through the *Form Layout* field.

4. A new window named *Select TSEs* opens (Figure 47), which allows the TSE selection to be included in the form. Click the check box next to the TSEs you want to include to the form. In this case, select the following TSEs:

- Last Name
- First Name
- Telephone Number
- E-mail
- Username

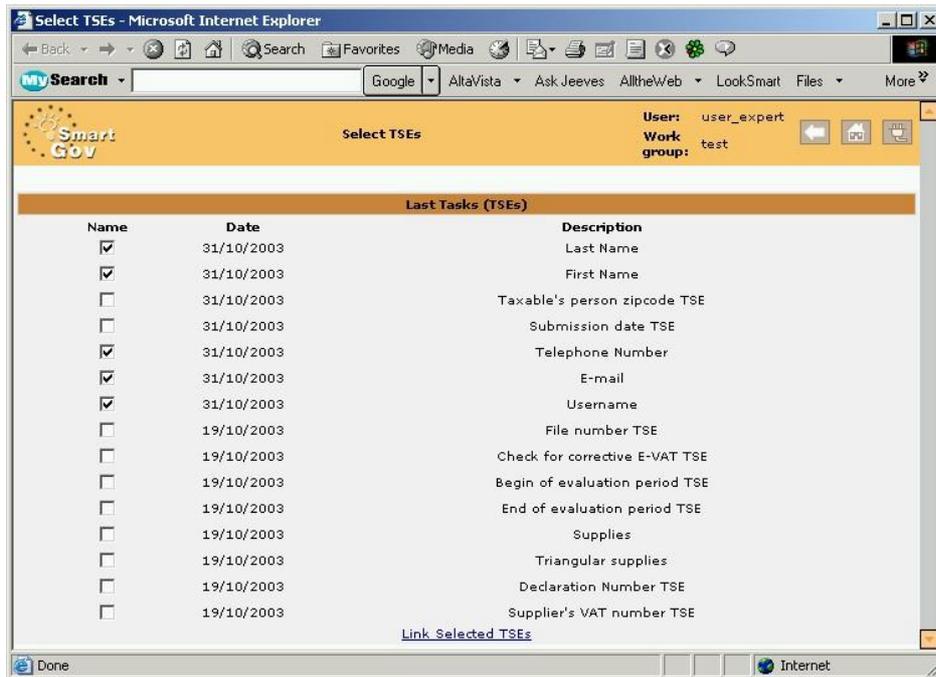


Figure 47 – Selecting the TSEs to be linked with the form

5. Click *Link Selected TSEs* to add them to the form. The *Select TSEs* window closes and now you may view the added TSEs on the *Form Edition* window (Figure 48).

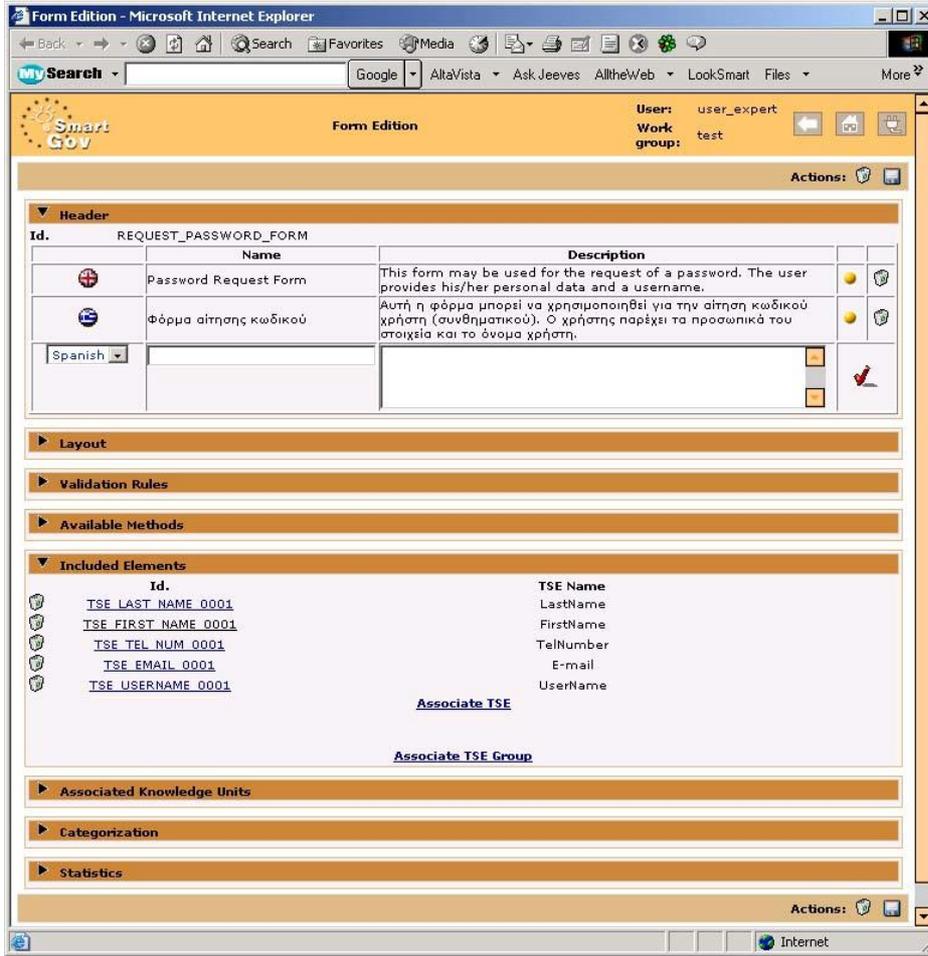


Figure 48 – Viewing the attached TSEs

6. Click on the *Associate TSE Group* link. A new window named *Select TSE Groups* opens (Figure 49), which allows the TSE Group selection. Click the check box next to the TSE Groups you want to include to the form. In this case, select the *Address TSE Group*.



Figure 49 – Selecting the TSE groups to attach to a form

- Click the *Link Selected TSEs* link to link the TSE Group. The *Select TSE Groups* window closes and the *Form Edition* window is brought up. The *Address Data* TSE Group is now visible in the *Included Elements* section.

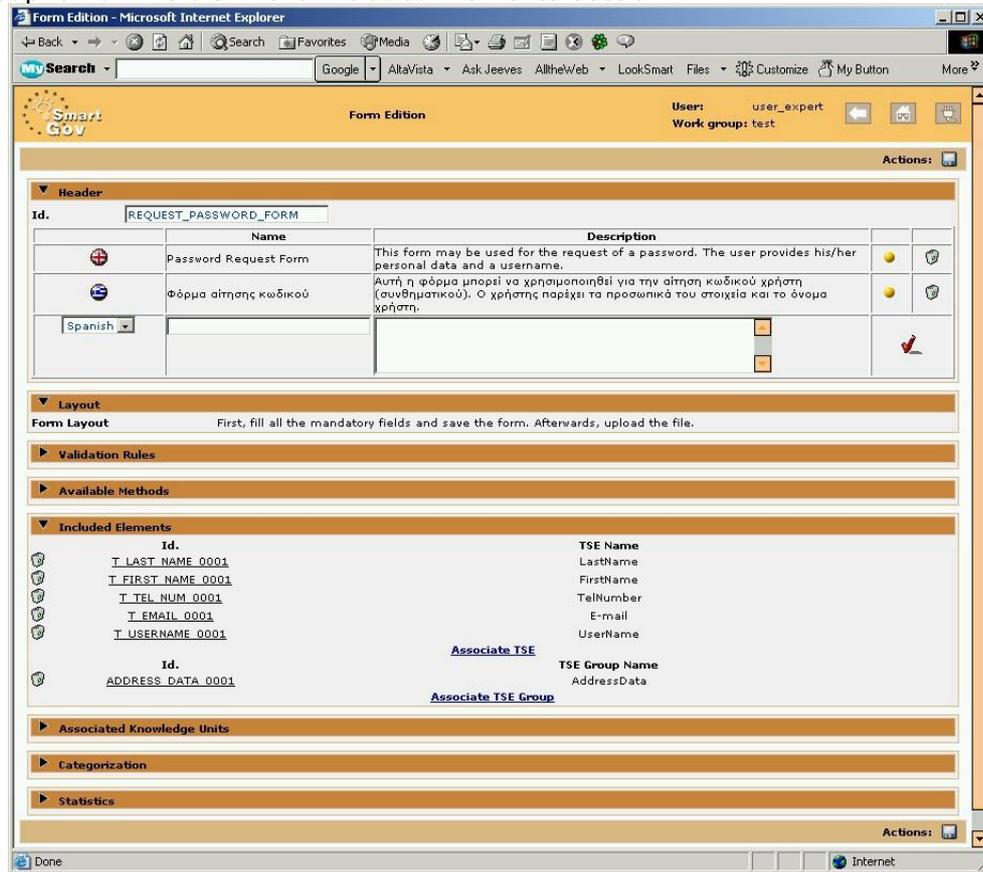


Figure 50 – Viewing the attached TSEs and TSE groups

7.1 Creating a TSE Validation Rule

Input provided by the user in the context of a transaction service has to be *validated*, i.e. checked for correctness. In the SmartGov platform, such checks are performed by means of *validation rules*, which may be attached to services, forms or to TSE groups. A validation check attached to a service can involve any field included in the service; validation checks attached to forms can only check fields appearing on the specific form, whereas validation checks attached to TSE groups can only check values of TSEs within the specific group. In this section the addition of a validation check for one of the form TSEs will be described.

- Click the arrow on the left side of *Validation Rules* to unfold it. A new link *Add a new rule* appears (Figure 51). Click the *Add a new rule* link.

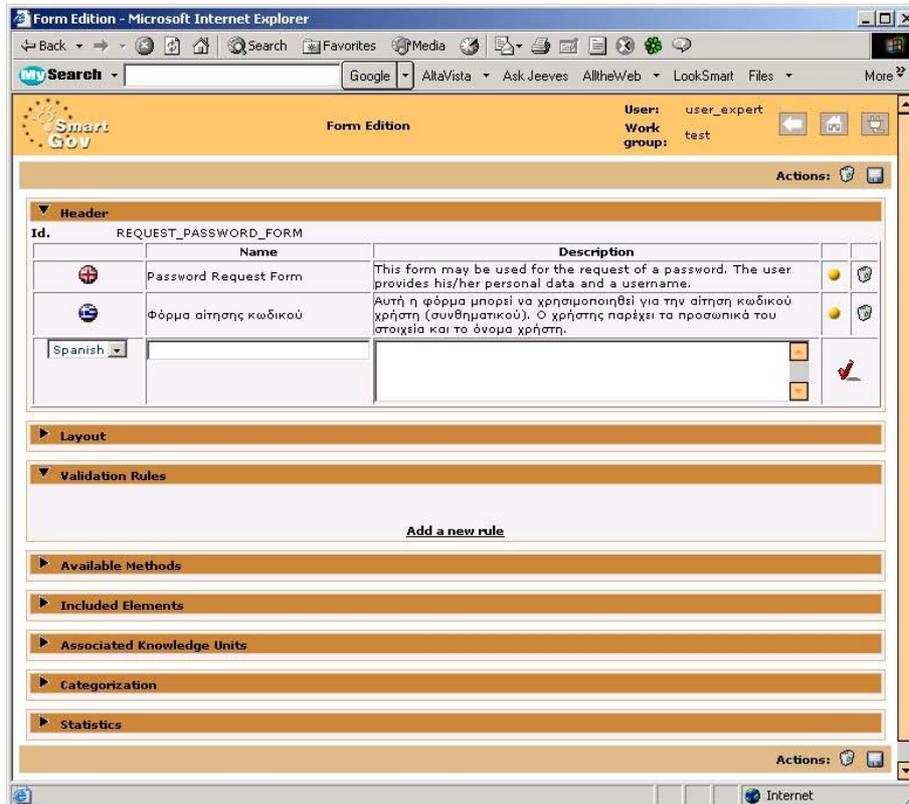


Figure 51 – Unfolding the “Validation rules” section

2. A new window named *Validation rule* edition opens (Figure 52). Fill in the Id field with the value *TSE_EMAIL_0001*. At the *Validation Rule Configuration* section choose *Front end and back end* from the drop down list *Validate at*. Click the *New method* link to define a new method.

Note: As a validation rule Id, enter the Id of the instantiated TSE that it validates.

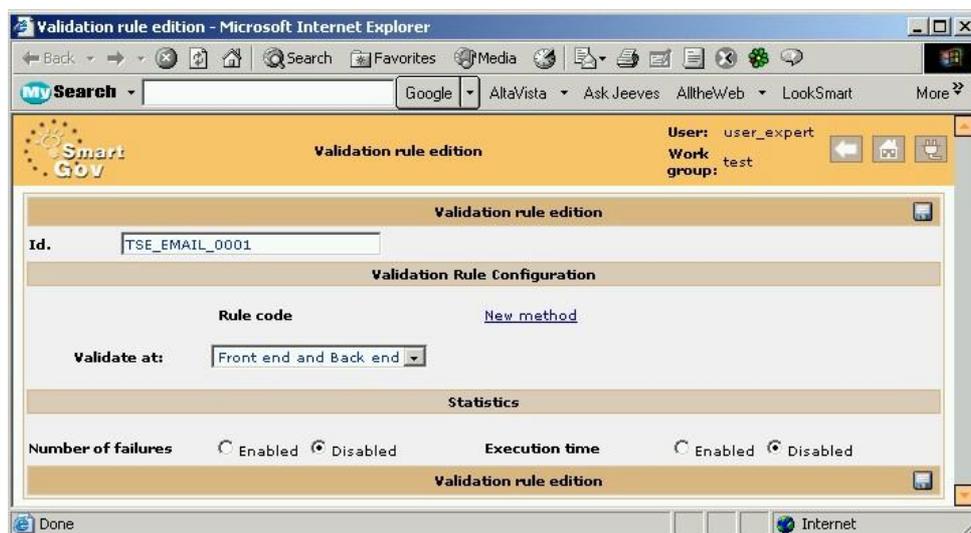


Figure 52 – Validation rule edition page

3. A new window named *Method Edition* opens (Figure 53). All the options and the information needed to create a new method can be entered through this page. Enter in the description field for the English language the value "This method checks if the e-mail contains the @ character", and for the Greek language the value "Αυτή η μέθοδος ελέγχει αν η διεύθυνση ηλεκτρονικού ταχυδρομείου περιέχει το χαρακτήρα @". Click the Add tick.
1. 10. At the *Method code* section choose *Full SmartGov rule* from the drop down list *Method type*. In the *Condition* field type:

```
NOT matches(TSE_EMAIL_0001,"[^@]+@[^@]+")
```

This is a condition that checks whether the E-mail is a character sequence with two parts, separated by the @ character; each one of the two parts should not contain the @ character. In other words, the sequence is of the form <character sequence 1>@<character sequence 2> where <character sequence 1> and <character sequence 2> do not contain the @ character. The *NOT* operator reverses the truth-value of the condition, thus the condition *holds* when the e-mail entered by the user *does not* fulfill the designated criteria.

2. Fill the *Action* field with the value

```
errorMessage(( "EN", "The e-mail should contain the recipient, the @ character and the domain") ("EL", "Η ηλεκτρονική διεύθυνση πρέπει να περιέχει τον παραλήπτη, τον χαρακτήρα @ και την περιοχή") ));
```

This designates that when the condition holds (i.e. the e-mail DOES NOT contain a recipient name, the @ character and a domain), an error message will be displayed to the to end-user indicating the error.

3. Click the Save or the disk icon to save this method. This window closes.

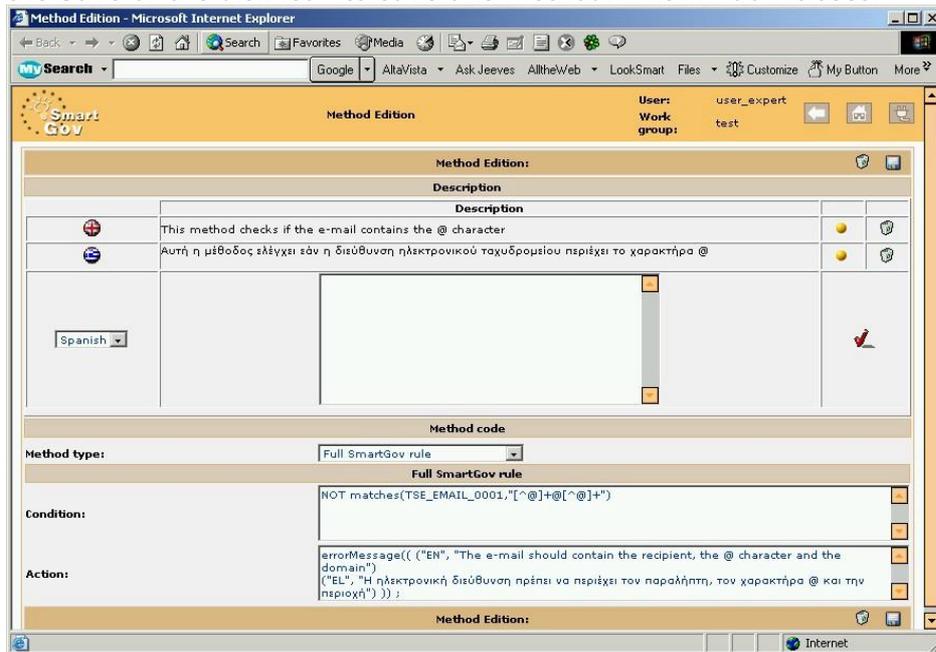


Figure 53 – Method edition window

4. The Validation rule edition window is now brought up. At the Validation Rule Configuration section you can see the new method you just created (Figure 54).
5. Click the disk icon to save this validation rule. This window closes.

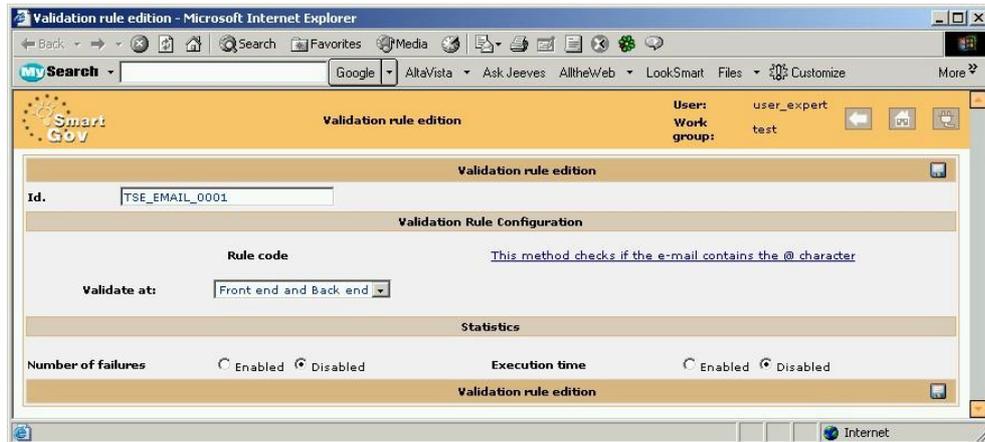


Figure 54 – Viewing the validation rule with the newly created method

6. In the *Form Creation* window you may now see the Validation Rule Id (Figure 55). The form is now complete, with the exception of the XHTML file containing the form layout, which is discussed later in this document.
7. Click *Save* to save the form.

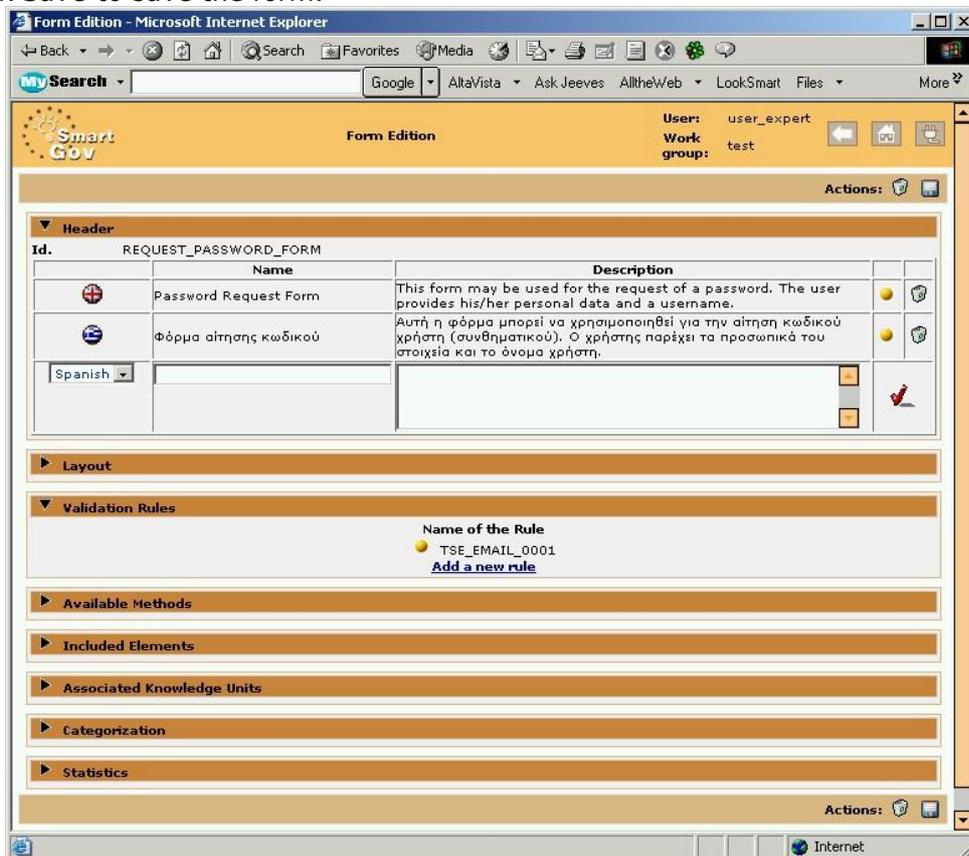


Figure 55 – Form editor, showing a form with a validation rule

8 Creating the TS

Now that the form for the service has been created, the Transaction Service (TS) creation can commence.

1. Click the *TS Editor* link in the left hand-side menu of the SmartGov application in order to bring up the Transaction Service editor (Figure 56). The main area shows the *Last TSs* zone, where another TS is listed (*E-vies*). Click the *New TS* link in the *Last TSs* zone.

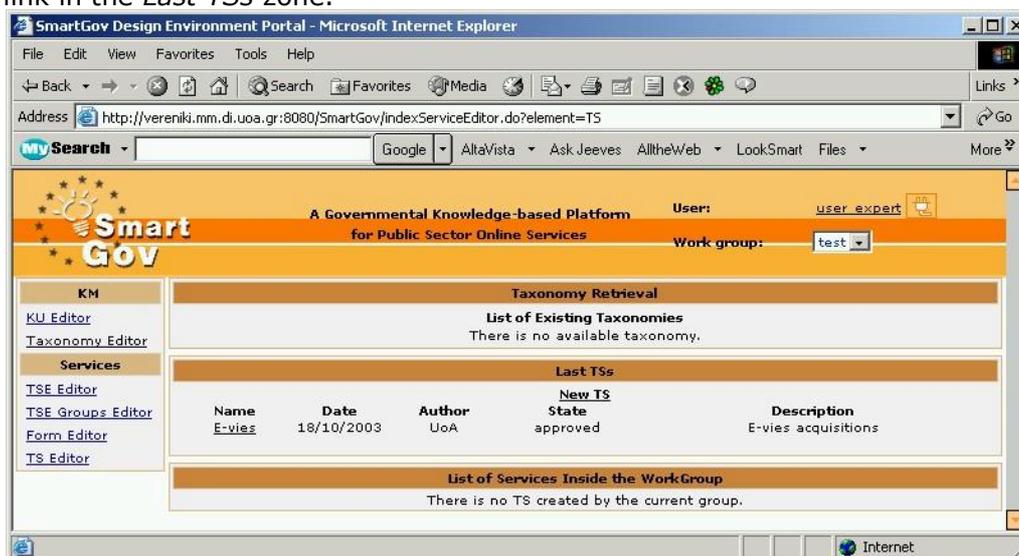


Figure 56 – Transaction Service Editor screen

2. A new window named *Transaction Service Edition (TS)* opens as shown in Figure 57. All the options and the information needed to create a transaction service can be entered through this page. You can click the arrows at the left side of each orange row to unfold it, allowing access to specific properties. The *Header* section is unfolded when the window opens, because its fields are mandatory for TS creation. Fill in the fields with the appropriate data. You have to provide an *Id* for the TS you create. The *name* and the *content* of the TS are multilingual. In order to enter this text, a language from the drop down menu should be firstly selected; afterwards, the content should be typed in the corresponding field. Finally, click on the red tick (Add) on the right side of the Content field in order to add the content in the specific language. For this TS provide the following data:

Field name	Field value
Id	REQUEST_PASSWORD_TS
Name (for English)	Request password service
Content (for English)	This service may be used to request a password
Name (for Greek)	Υπηρεσία αίτησης κωδικού
Content (for Greek)	Η υπηρεσία αυτή χρησιμοποιείται για την αίτηση κωδικού χρήστη

3. Click the right arrow next to *Included Form Sets* to unfold it. Through this section, the forms that will be included in the TS will be specified. Click the *Add new FormSet* link that appears (Figure 57).

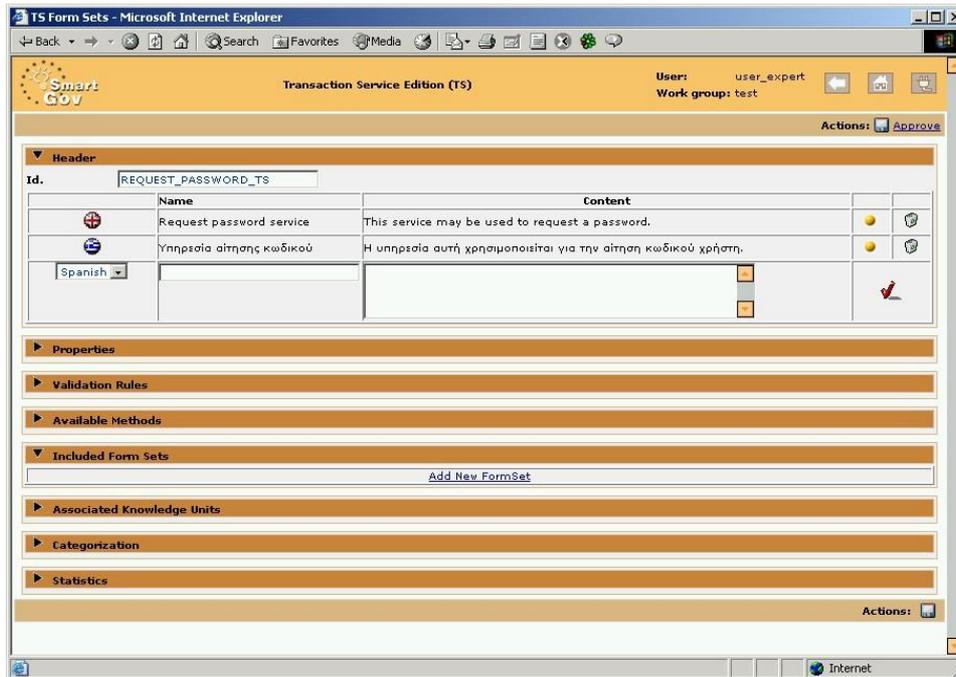


Figure 57 – Transaction Service Edition screen

4. A new window named *TS Form Sets* opens. This window contains a list of all the forms that exist in the SmartGov platform; any of these forms may be included in the TS. Click on the selection box in the *Name* column of *Password Request Form* to select this form to be included in the new TS. Click the *Save changes* link. This window closes.

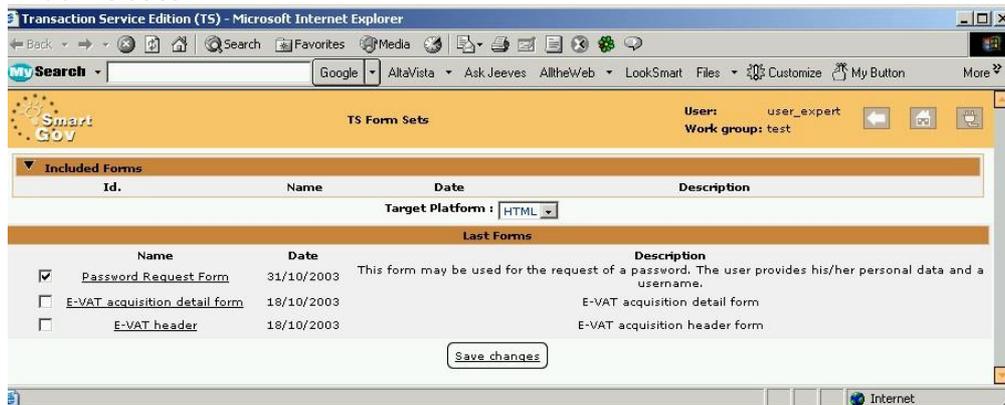


Figure 58 – Selecting forms to be included in the Transaction Service

5. In the *Transaction Service Edition* (TS) window, the form selected in the *Included Form Sets* area now appears (Figure 59). Click the disk icon to save the TS.

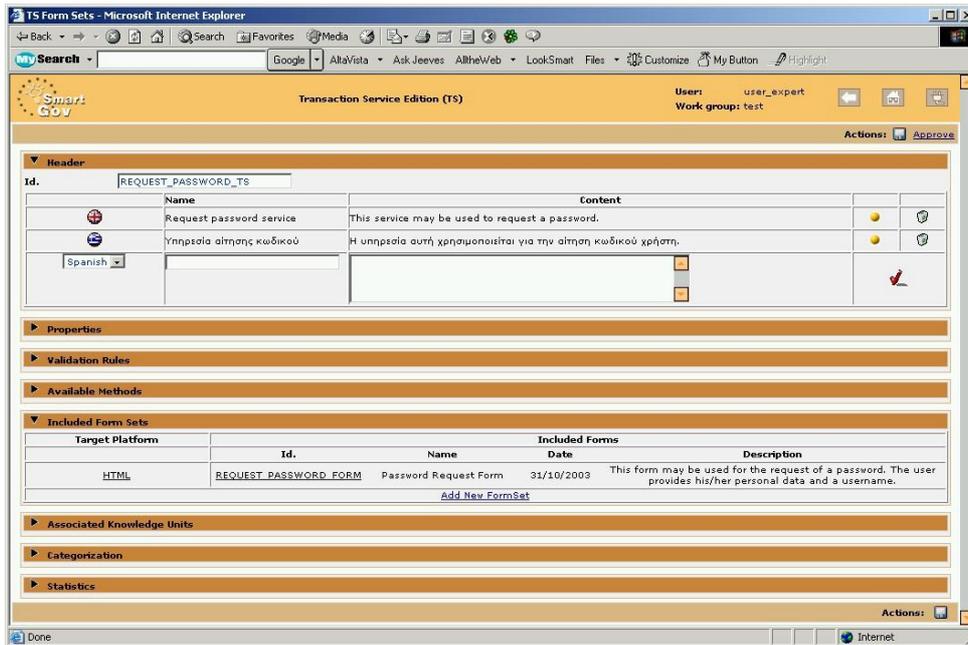


Figure 59 – Transaction service with a form attached

6. Similarly to KUs, transaction services undergo an approval procedure. Once a transaction service is approved no changes to its description may be made; however, changes are still possible for elements (forms, TSE groups and TSEs used within the service). Click the *Approve* link to finalise the transaction service description. The various sections now unfold, displaying additional information about the TS (Figure 60). You can now click the Back link or simply close this window.

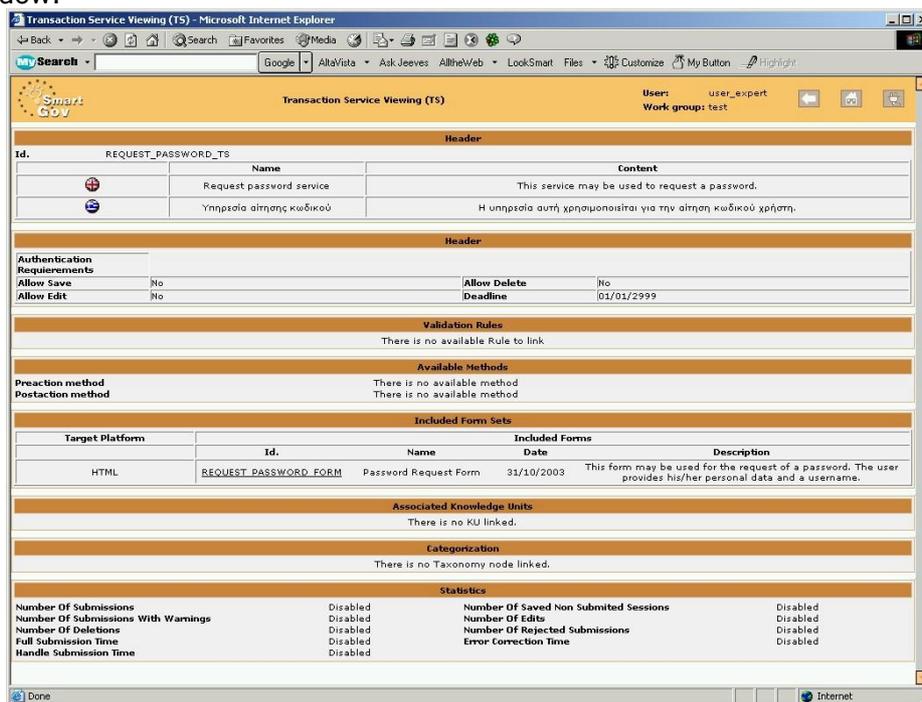


Figure 60 – Viewing an approved TS

7. In the main window of the SmartGov Application you can now view the TS you have just created; the TS appears both in the *Last TSs* zone and in the *List of Services Inside the Work Group* zone (Figure 61).

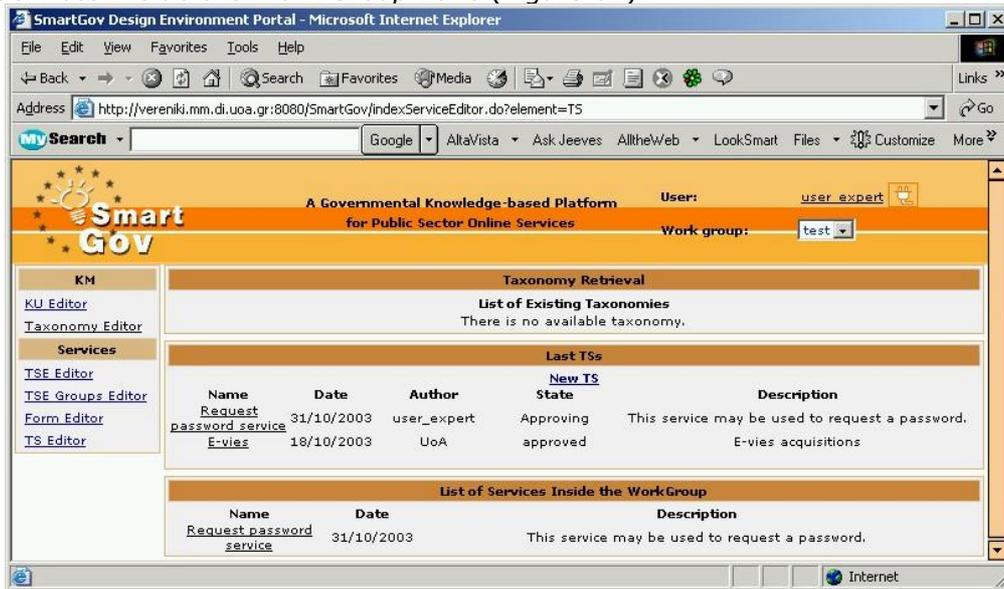


Figure 61 – Main TS editor screen, showing the new service

9 Creating the Visual Form Layout

During this step, DreamWeaver MX will be firstly used to design the visual layout for the form in HTML. Afterwards, the parts of the form will be associated with SmartGov items (TSEs, TSE groups, Kus). In order to associate form elements with the SmartGov items a special group of DreamWeaver tags will be used, which must be *imported* to DreamWeaver MX. This procedure should be performed by the system administrator and is described in section 9.1.

9.1 Importing the tags

During this procedure the SmartGov DreamWeaver Integration Tool will be used. This tool connects to an XML repository and retrieves all TS, Forms, TSE Groups and TSEs. It creates a tree structure of tags and imports it in DreamWeaver.

1. Run the SmartGov DreamWeaver Integration Tool. To do so, locate the directory where it is installed and double-click `run.bat`. The form illustrated in Figure 62 appears.

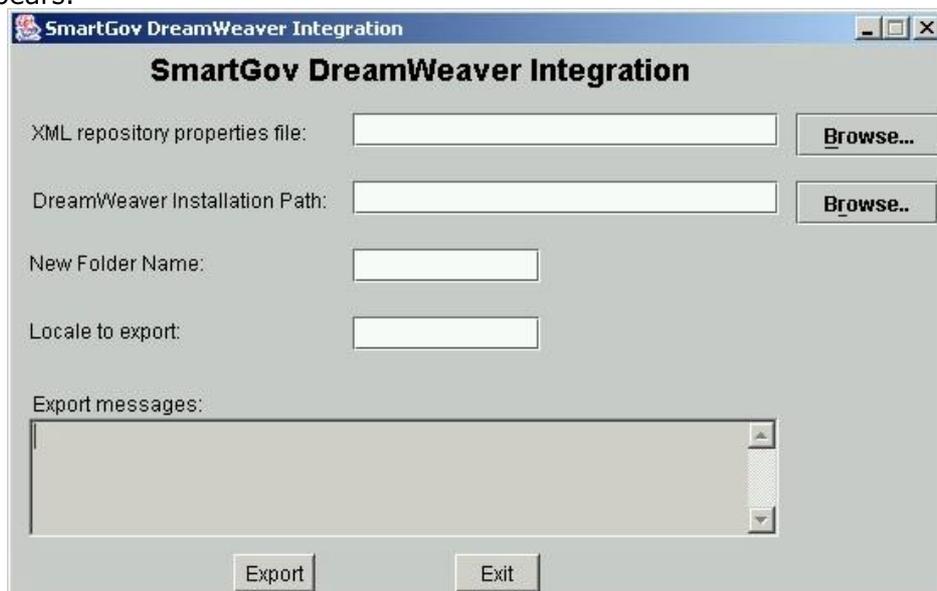


Figure 62 – SmartGov DreamWeaver Integration tool

2. Designate the XML repository property file; use the respective *Browse* button to locate it easily using a file system browser.
3. Provide the path to the configuration directory of the Dreamweaver Installation. Again you may use the respective *Browse* button to facilitate your work.
4. Provide a folder name for the new tags; the value *SmartGov* is recommended.
5. Provide the locale (*en* for English, *el* for greek, *es* for Spanish, etc). This defines the language in which all the multilingual elements will appear in the DreamWeaver MX environment. Note that this does not restrict the final service to using the specific language.
6. Click *Export* to begin the tag export process (Figure 63). The process will take one or two minutes; the "Finished" message will appear in the "Export messages" area when the procedure completes.

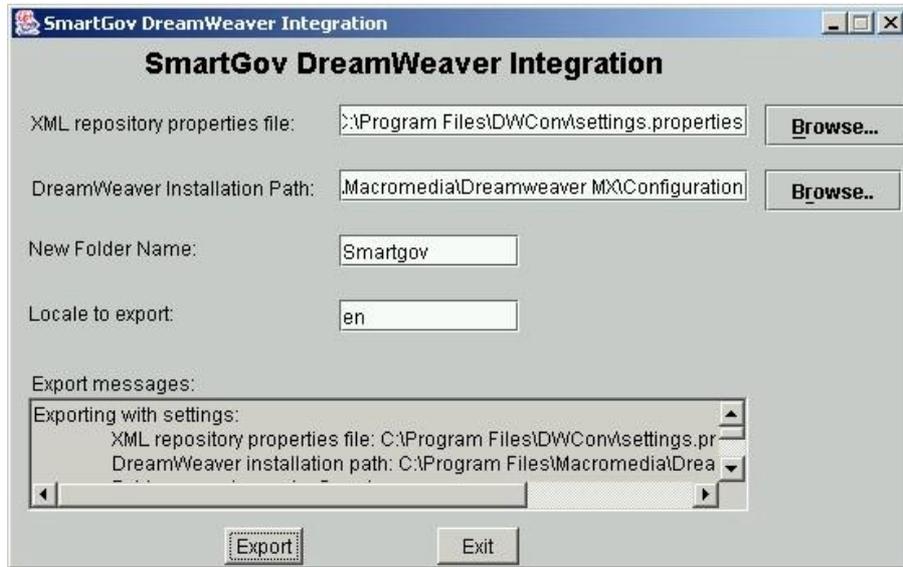


Figure 63 – Integrating tags into DreamWeaver MX

Note: Before every new export of tags to the DreamWeaver, run Dwcleanup.bat located in the SmartGov DreamWeaver Integration Tool directory to ensure smooth operation.

9.2 Designing the form in DreamWeaver

1. Launch DreamWeaver MX and design the form as you would design any HTML form. Remember to include all the necessary placeholders for the error and help elements (see Figure 64); these will be replaced later by the appropriate tags.

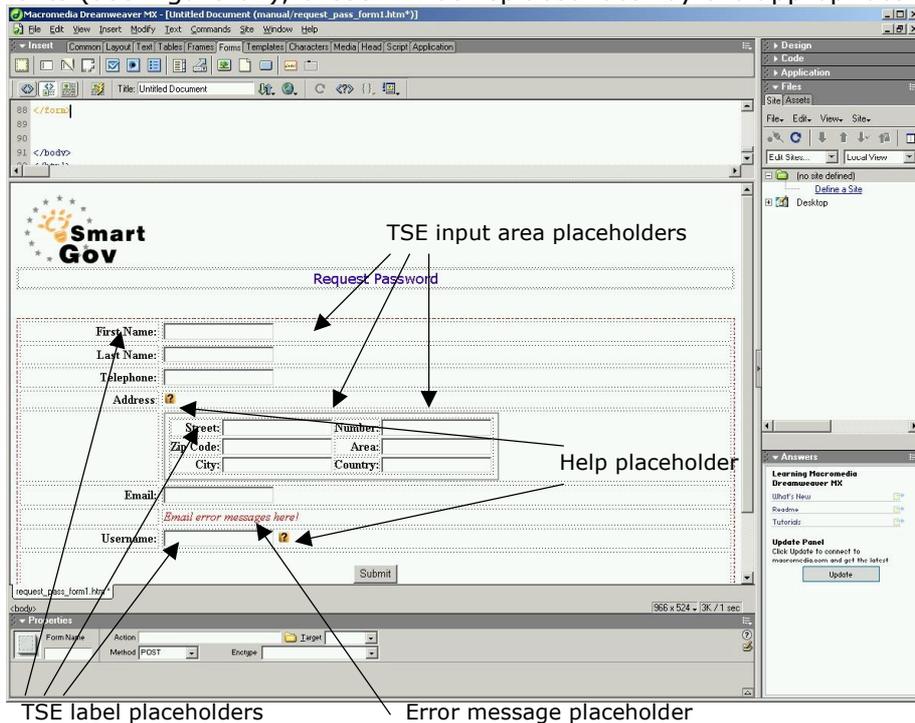


Figure 64 – Form design with placeholders

The appearance of the form as shown in a browser should be similar to the one illustrated in Figure 65.

The screenshot shows a Microsoft Internet Explorer browser window titled "Untitled Document - Microsoft Internet Explorer". The address bar contains the path "Z:\smartgov\WP\WP08>manual\request_pass_form.htm". The page content features the "Smart Gov" logo at the top left, followed by the title "Request Password" in blue. The form consists of several input fields: "First Name:", "Last Name:", "Telephone:", "Address:" (with a question mark icon), and "Email:". The "Address:" field is a complex form with sub-fields for "Street:", "Number:", "Zip Code:", "Area:", "City:", and "Country:". Below the "Email:" field is a red italicized text prompt: "Email error messages here!". At the bottom of the form is a "Username:" field with a question mark icon and a "Submit" button. The browser's status bar at the bottom shows "Done" and "Local intranet".

Figure 65 – Form appearance

When the form is complete, the visual elements of the forms must be replaced with the appropriate SmartGov tags. The replacement procedure is described in the following paragraphs. Please note that this procedure will distort the appearance of the form, so it is strongly recommended that a copy of the form be saved for future reference.

2. Click at a form location *before any SmartGov item on the form*, including the form title. The top of the page is normally an appropriate place.
3. Select *Insert / Tag* (see Figure 66).

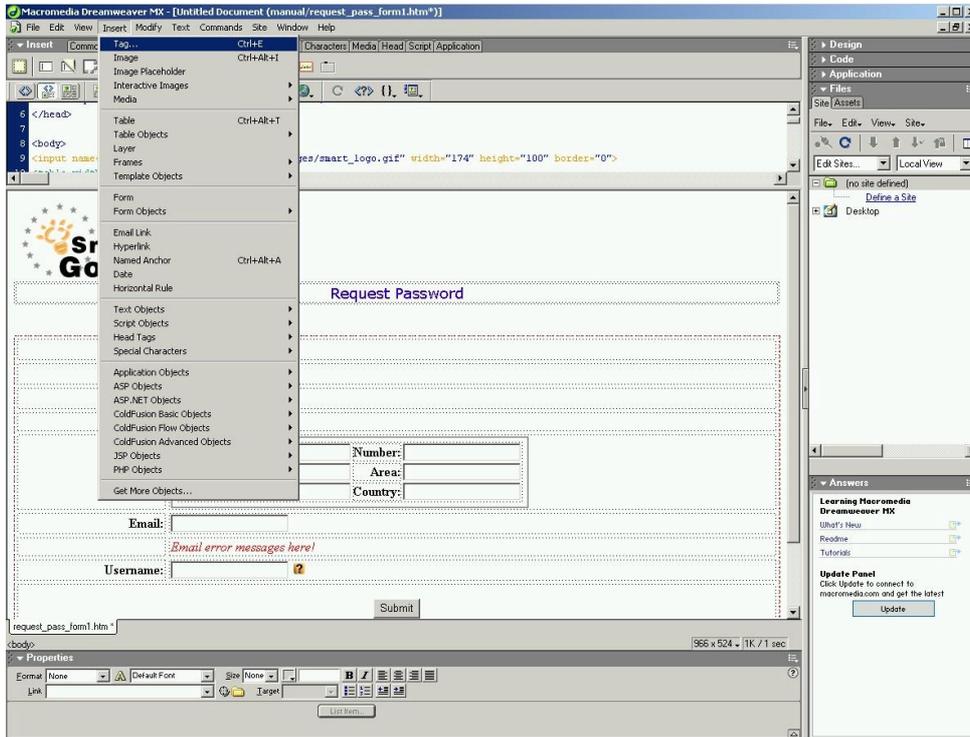


Figure 66 – The Insert/Tag menu

4. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form* in the tags hierarchy. From the right pane choose the `SGFORM_REQUEST_PASSWORD_BEGIN` tag and click on the *Insert* button (Figure 67).

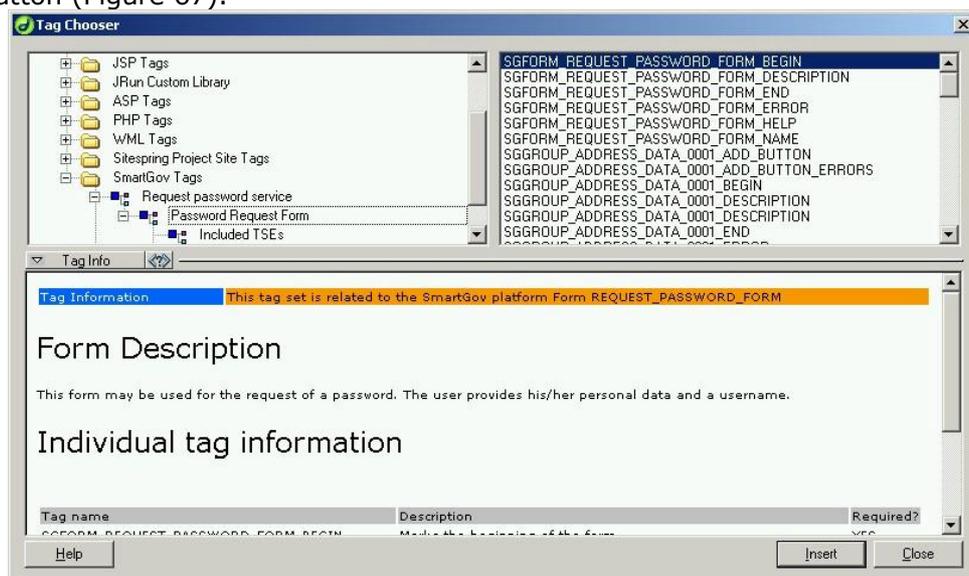
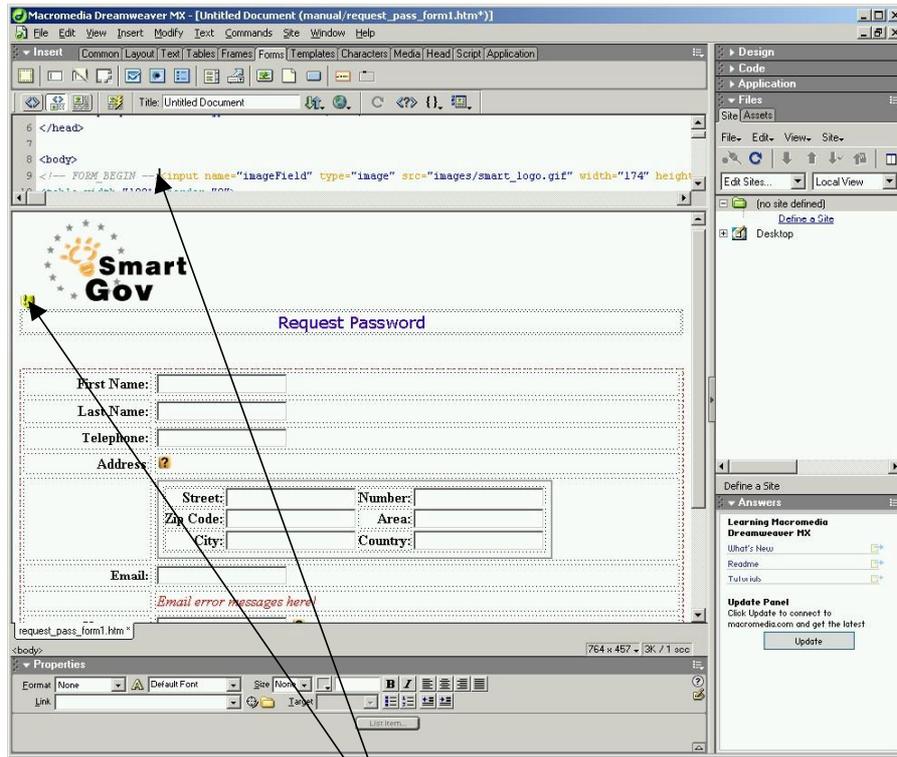


Figure 67 – Inserting the “Form Begin” tag

The tag has been inserted at the beginning of the form, as it seen in both the html view (as a comment) and the design view (as a comment indicator) [Figure 68].



Form begin tag

Figure 68 – “Form begin” tag

5. Click at a form location *after any SmartGov item on the form.*
6. Select *Insert – Tag.*
7. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form* in the tags hierarchy. From the right pane choose the *SGFORM_REQUEST_PASSWORD_END* tag (Figure 69) and click on the *Insert* button.

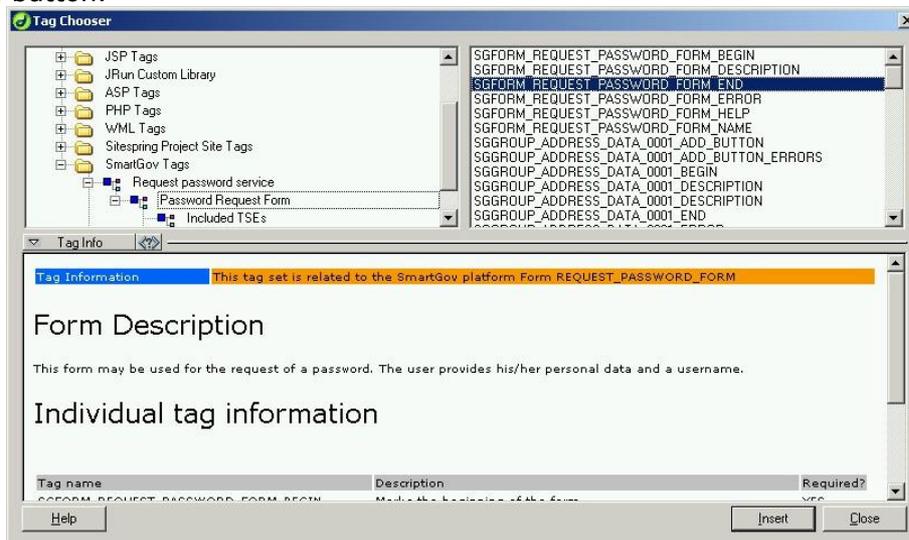


Figure 69 – Inserting the “form end” tag

The tag has been inserted at the end of the form, as it seen in both the html view (a comment) and the design view (a comment indicator) [Figure 70].

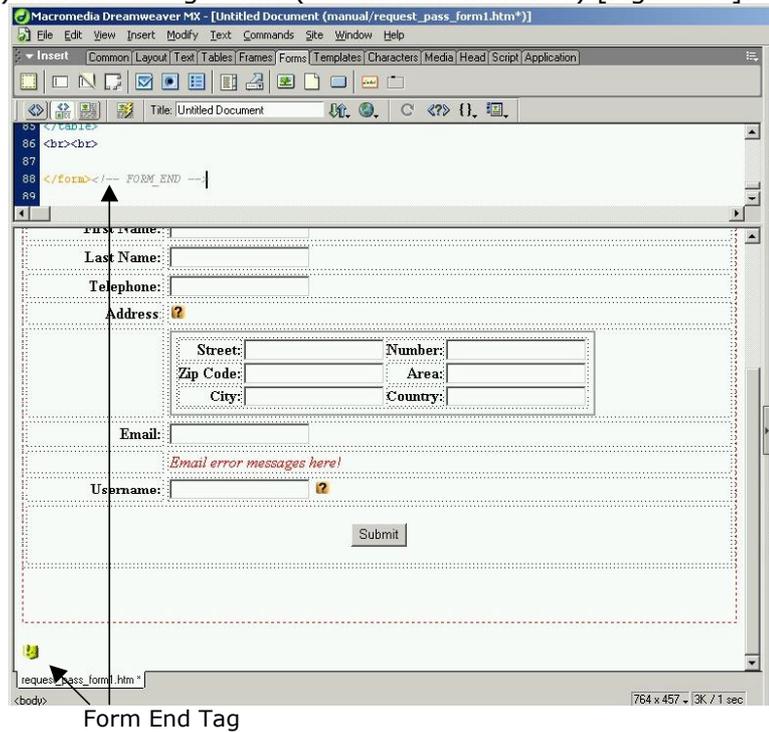


Figure 70 – The “Form end” tag

8. Select the form title “Request Password”.

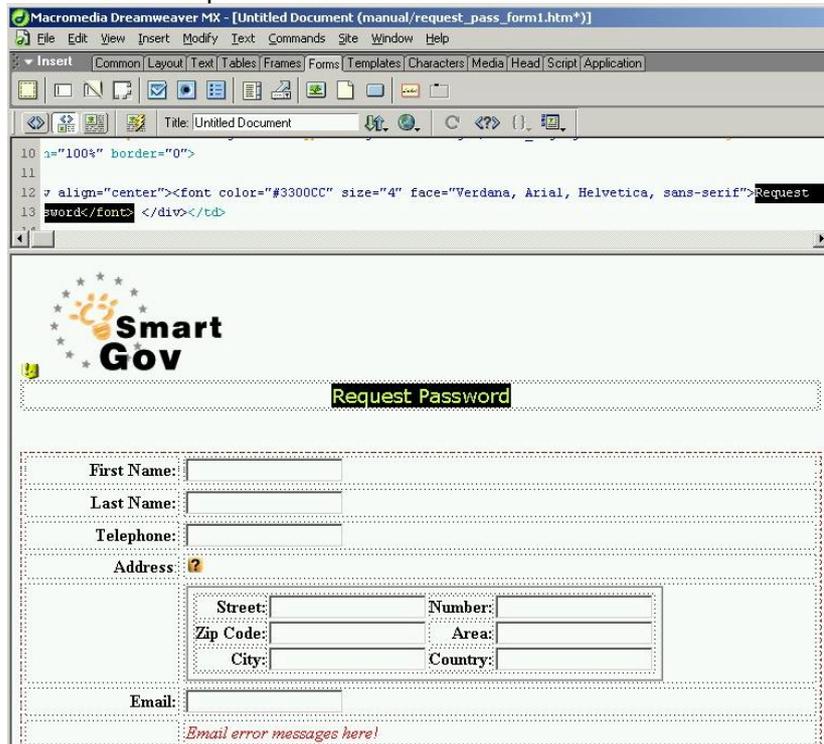


Figure 71 – Selecting the form title

9. Delete the text pressing the *delete* button from the keyboard or selecting from the menu *Edit / Clear*.
10. Select *Insert / Tag*.
11. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form* in the tags hierarchy. From the right pane choose the `SGFORM_REQUEST_PASSWORD_FORM_NAME` tag and click on the *Insert* button (Figure 72).

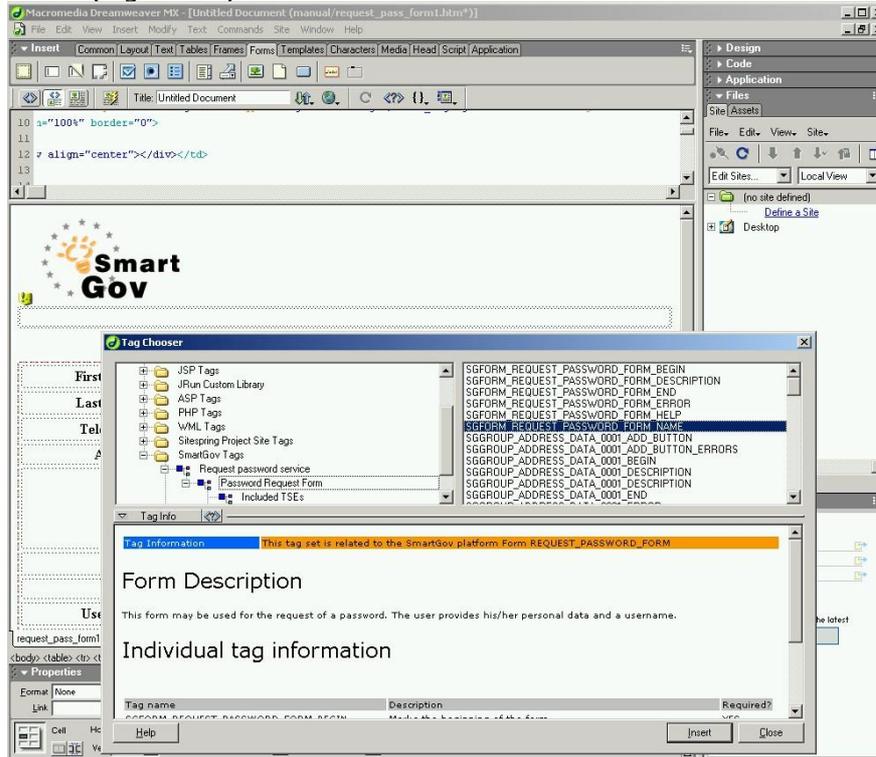
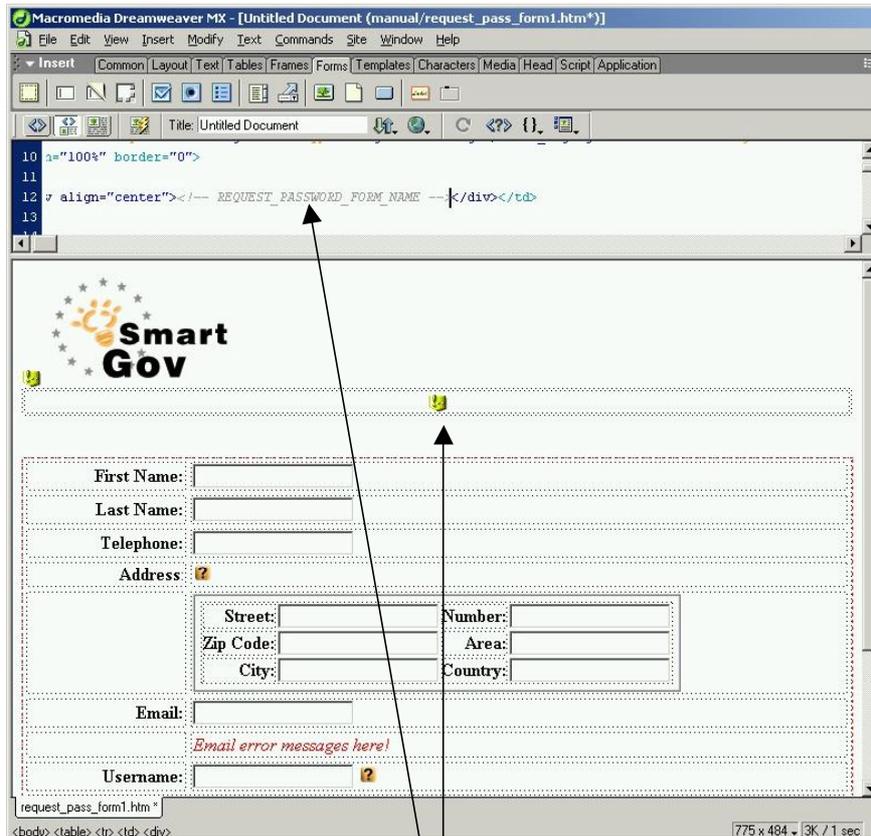


Figure 72 – Inserting the “Form Name” tag

The tag has replaced the form name and is visible both in the code view (as a comment) and in the design view (as a comment indicator) [Figure 73].



The "form name" tag

Figure 73 – The form name tag

12. Place the SGGROUP_ ADDRESS_DATA_0001_BEGIN tag *exactly at the beginning* of the visual elements that comprise the group's elements. To do so, select the first row of the table hosting group elements, by moving the mouse pointer to the left of the row (the pointer becomes an horizontal right arrow) and clicking the left mouse button (Figure 74).

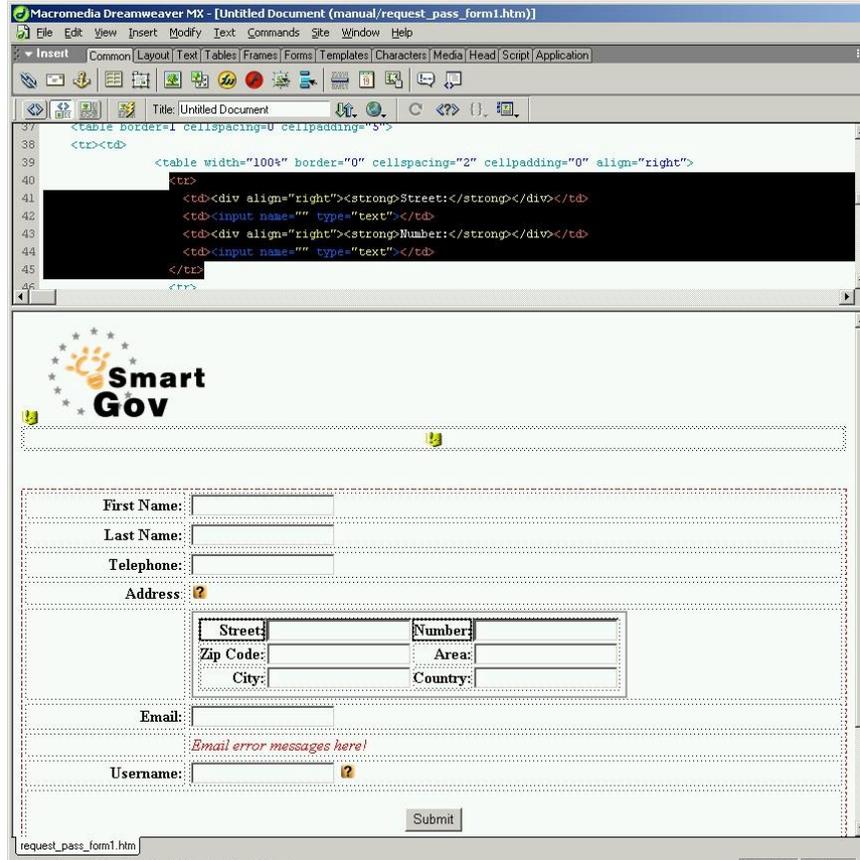


Figure 74 – Selecting the first group row

13. Switch to code view by selecting *View / Code* if the code view is not already active, and click in the beginning of the selected code area. Alternatively to clicking, you can press the left arrow cursor key, after switching to code view. The cursor will now be placed in the beginning of the first element of the group (Figure 75).

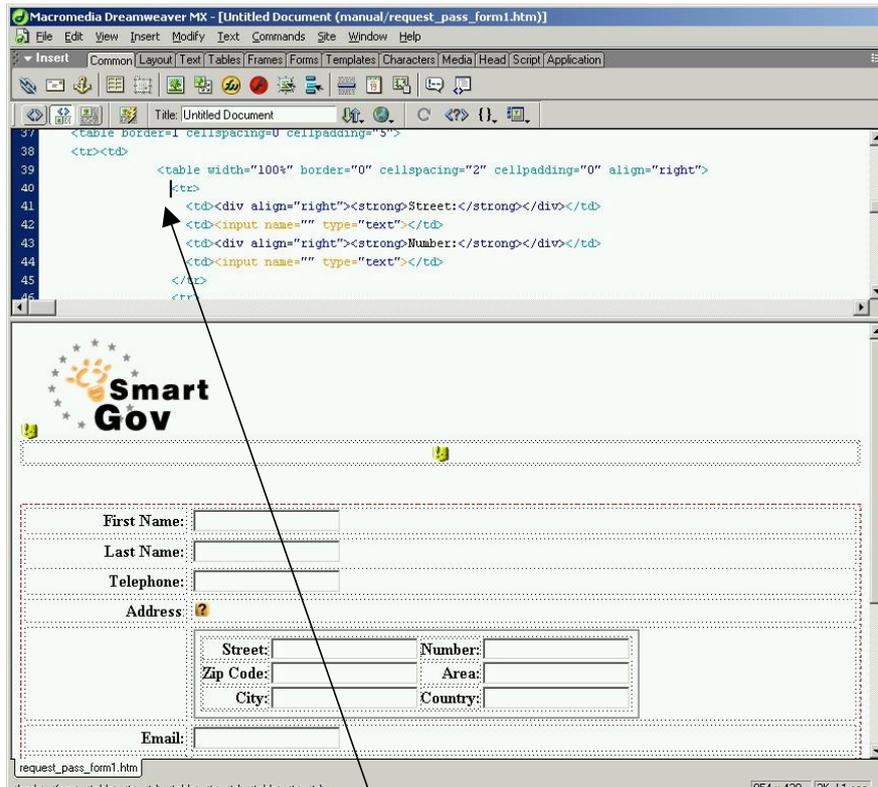


Figure 75 – Cursor positioned at the beginning of the row

14. Select *Insert / Tag*.
15. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form / Included TSE Groups* in the tags hierarchy. From the right pane choose the *SGGROUP_ADDRESS_DATA_0001_GROUP_BEGIN* tag and click on the *Insert* button (Figure 76).

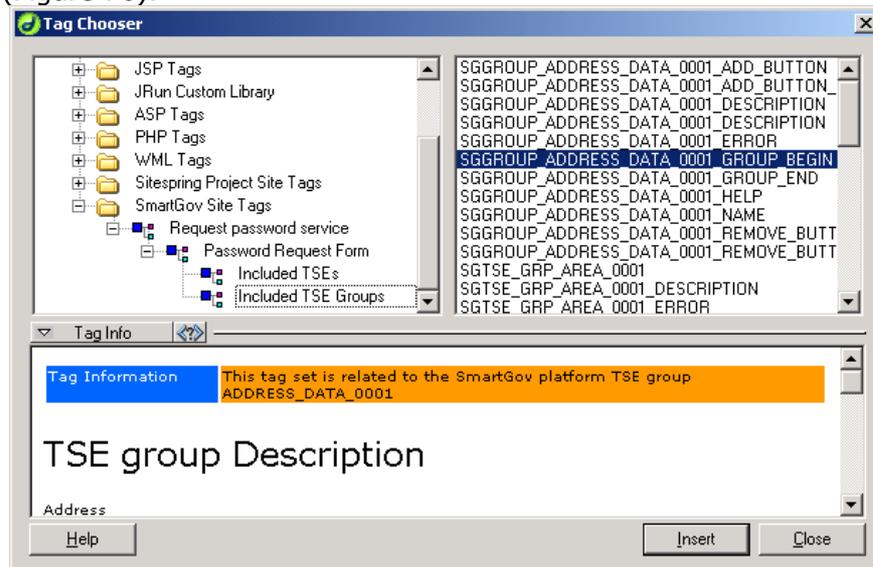


Figure 76 – Selecting the "Group begin" tag

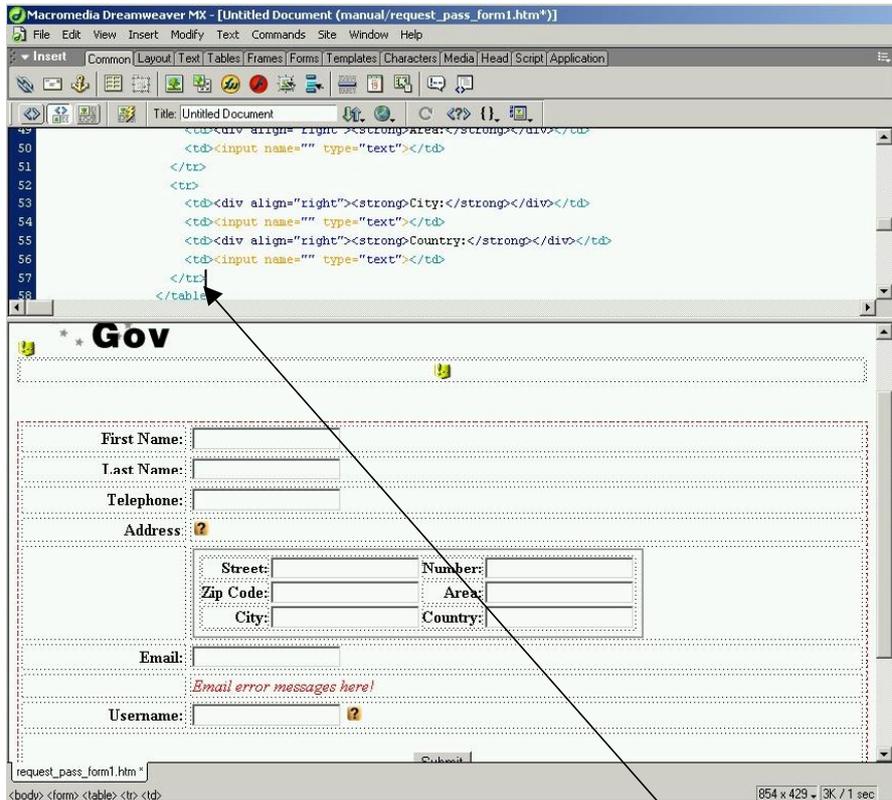


Figure 78 – Cursor positioned immediately after the last group element

18. Select *Insert / Tag*.
19. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form / Included TSE Groups* in the tags hierarchy. From the right pane choose the *SGGROUP_ADDRESS_DATA_0001_GROUP_END* tag and click on the *Insert* button (Figure 79).

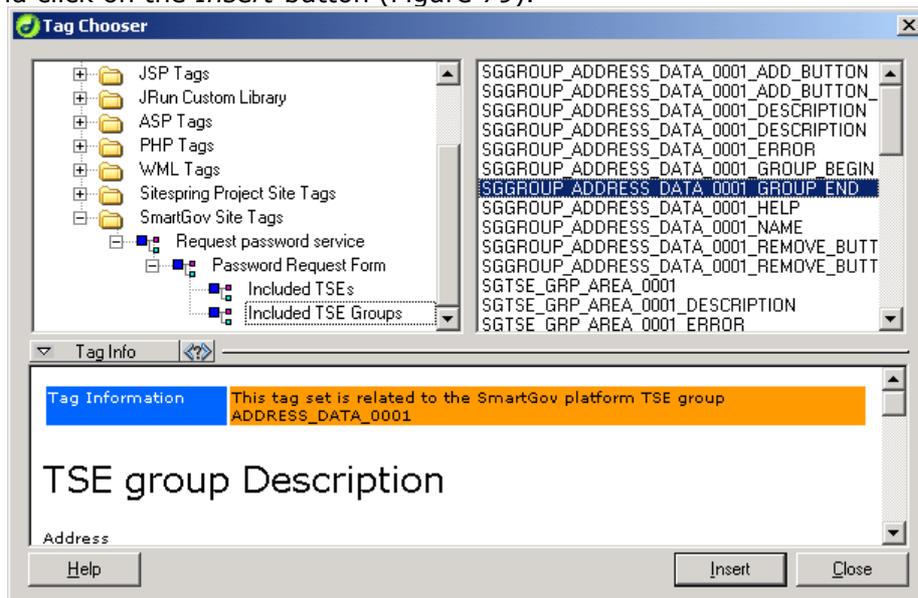


Figure 79 – Inserting the “group end” tag

20. Select the TSE group name, which is the "Address" label (Figure 80).

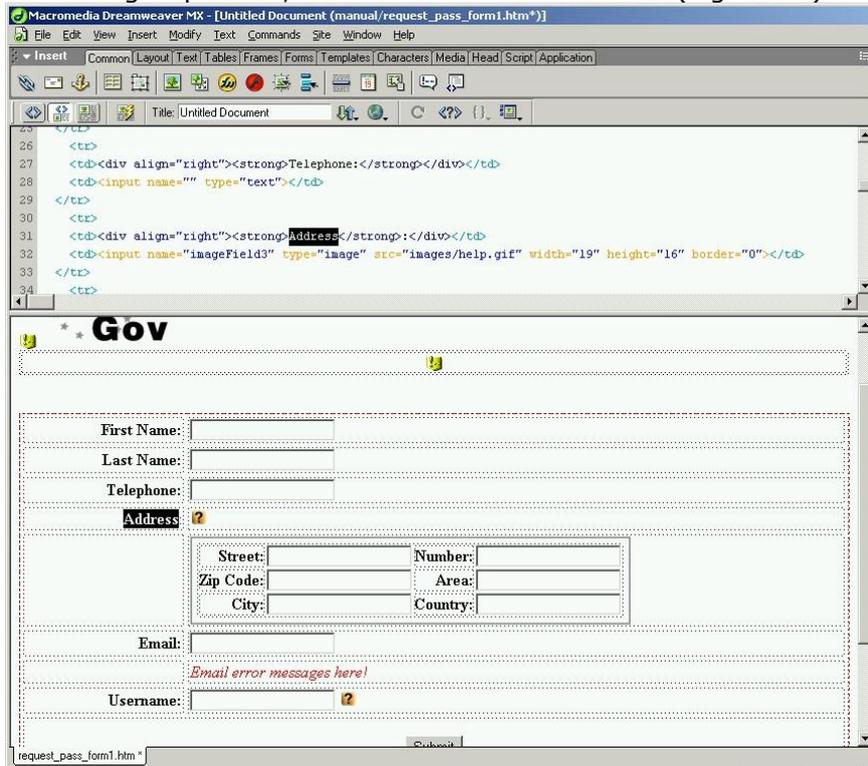


Figure 80 – Selecting the group name label

21. Delete the text pressing the *delete* button from the keyboard or selecting from the menu *Edit / Clear*.
22. Select *Insert / Tag*.
23. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form / Included TSE Groups* in the tags hierarchy. From the right pane choose the `SGGROUP_ADDRESS_DATA_0001_NAME` tag and click on the *Insert* button (Figure 81).

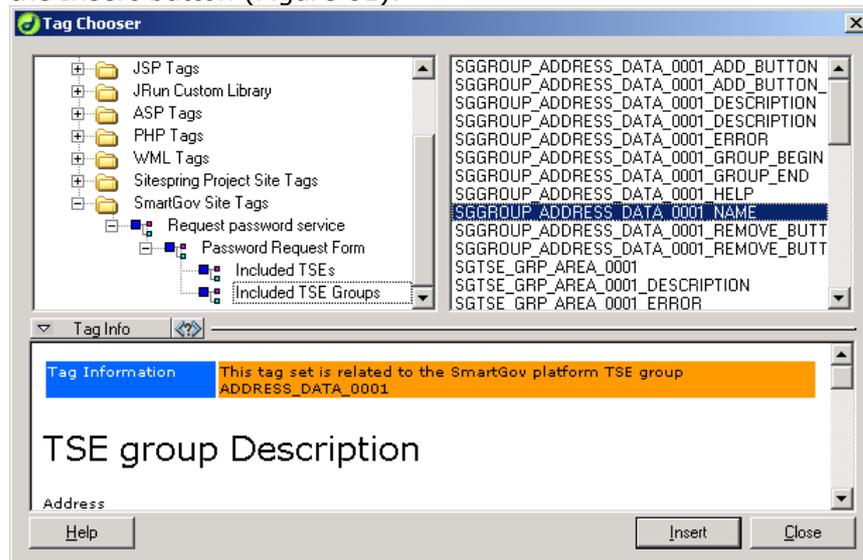


Figure 81 – Inserting the "name" tag for the group

24. Select the help placeholder next to the TSE group name (Figure 82).

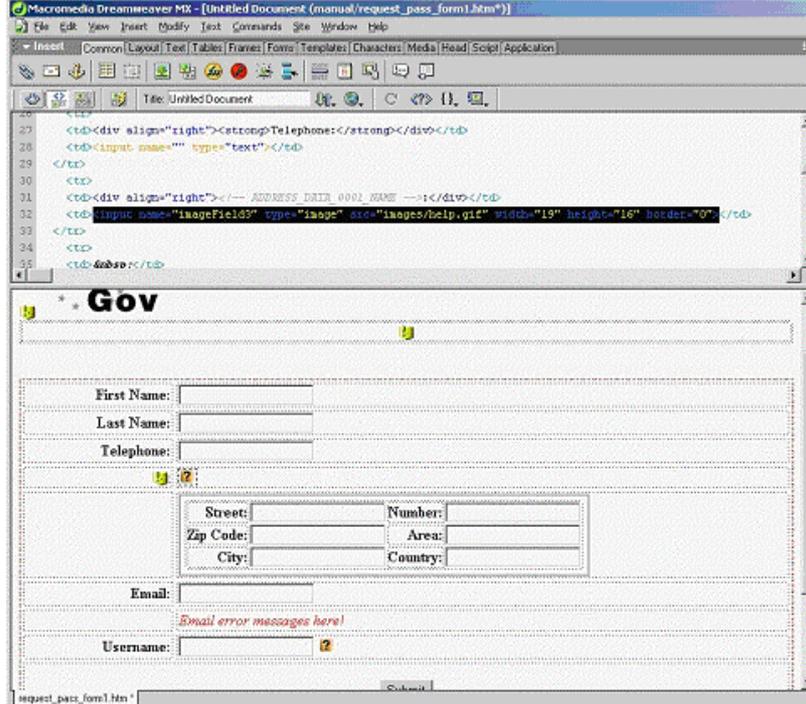


Figure 82 – Selecting the help placeholder

25. Delete the help placeholder pressing the *delete* button from the keyboard or selecting from the menu *Edit / Clear*.

26. Select *Insert / Tag*.

27. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form / Included TSE Groups* in the tags hierarchy. From the right pane choose the *SGGROUP_ADDRESS_DATA_0001_HELP* tag and click on the *Insert* button.

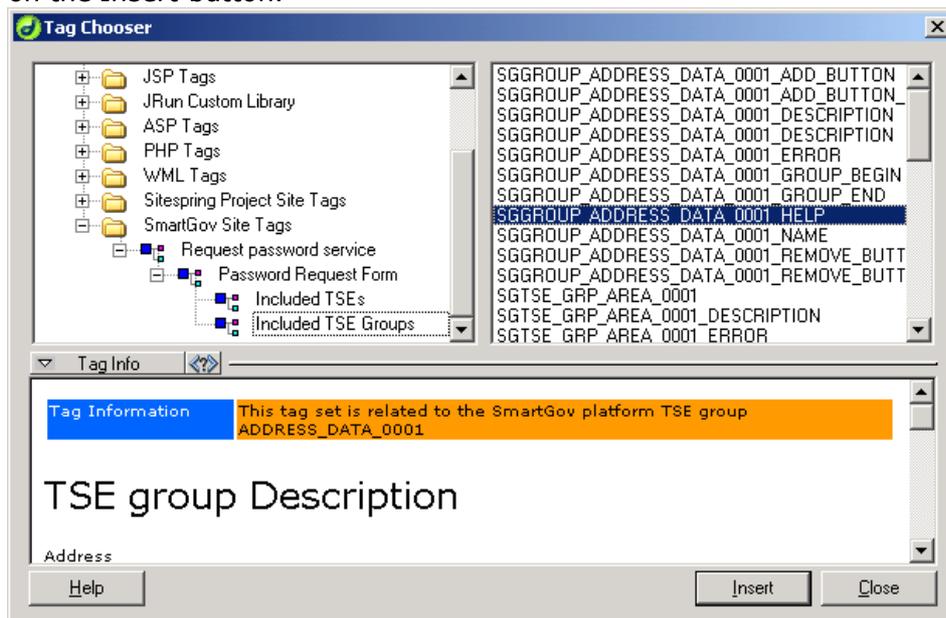


Figure 83 – Inserting the “group help” tag

The following step will be to replace each TSE group element (both the input area and the label) with the appropriate tag.

28. Select the "Street" label (Figure 84).

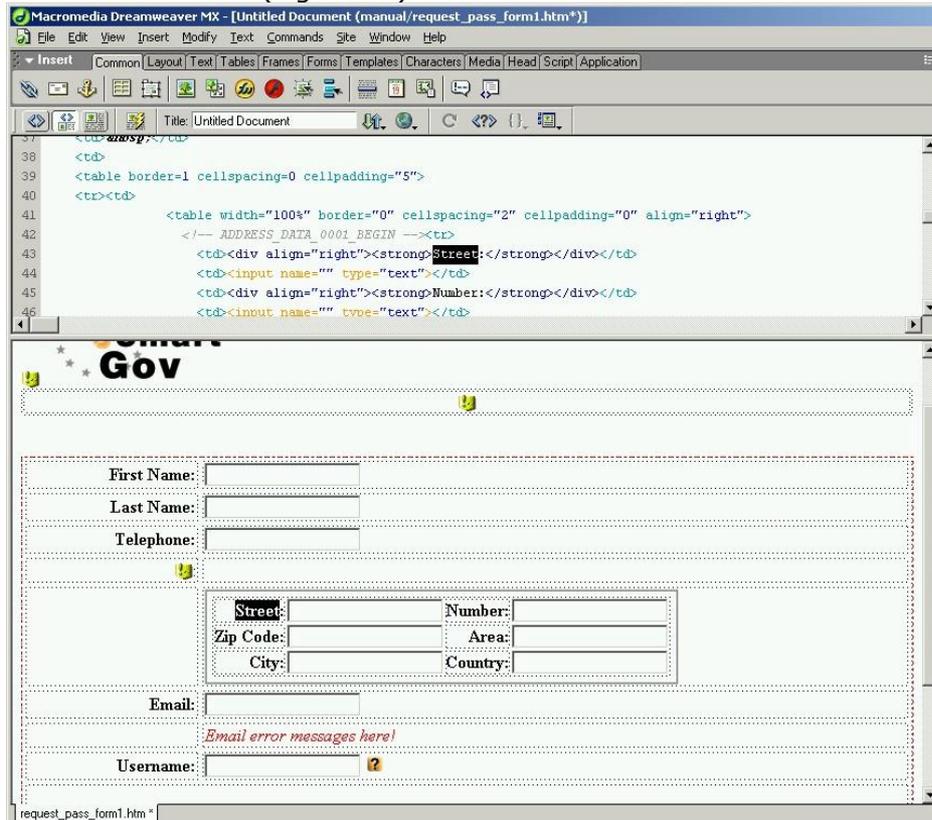


Figure 84 – Selecting the TSE label

29. Delete the text pressing the *delete* button from the keyboard or selecting from the menu *Edit / Clear*.
30. Select *Insert / Tag*.
31. In the *Tag Chooser* window navigate to the *SmartGov Tags – Request Password Service – Password Request Form – Included TSE Groups* in the tags hierarchy. From the right pane choose the *SGTSE_G_STREET_0001_DESCRIPTION* tag and click on the *Insert* button (Figure 85).

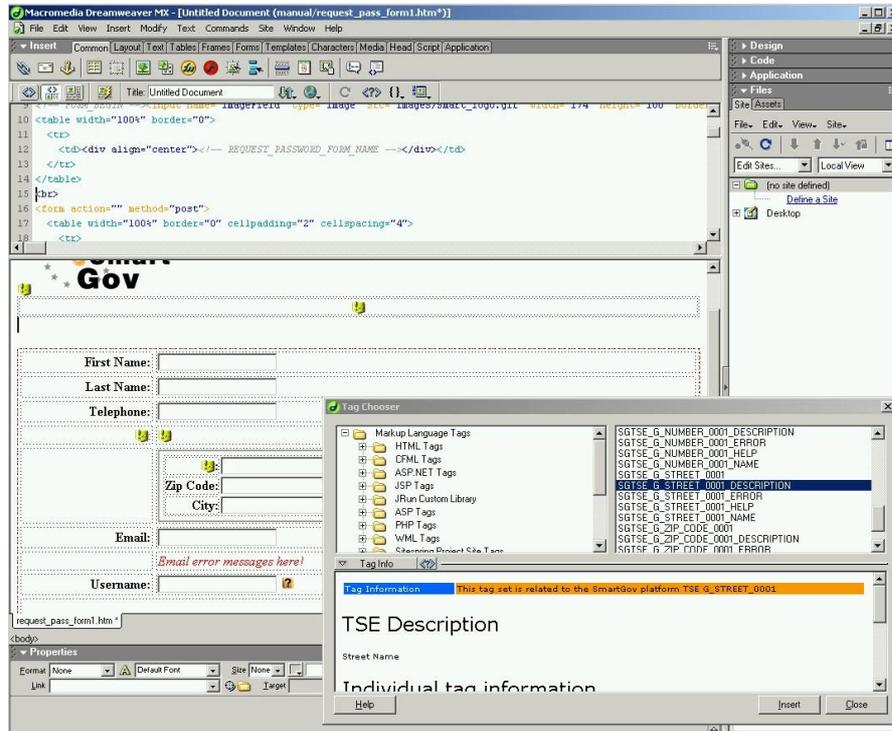


Figure 85 – Inserting the TSE description tag

32. Select the text box indicating the space for the street element (Figure 86).

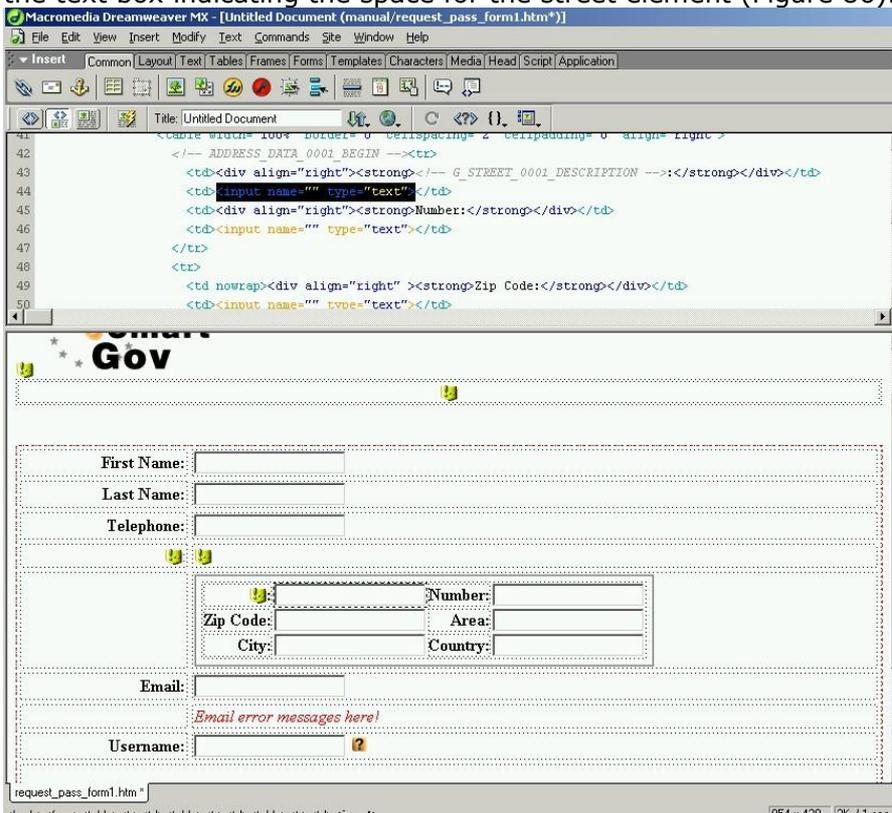


Figure 86 – Selecting the TSE input area

33. Delete the text box pressing the *delete* button from the keyboard or selecting from the menu *Edit / Clear*.
34. Select *Insert / Tag*.
35. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form / Included TSE Groups* in the tags hierarchy. From the right pane choose the *SGTSE_G_STREET_0001* tag and click on the *Insert* button.

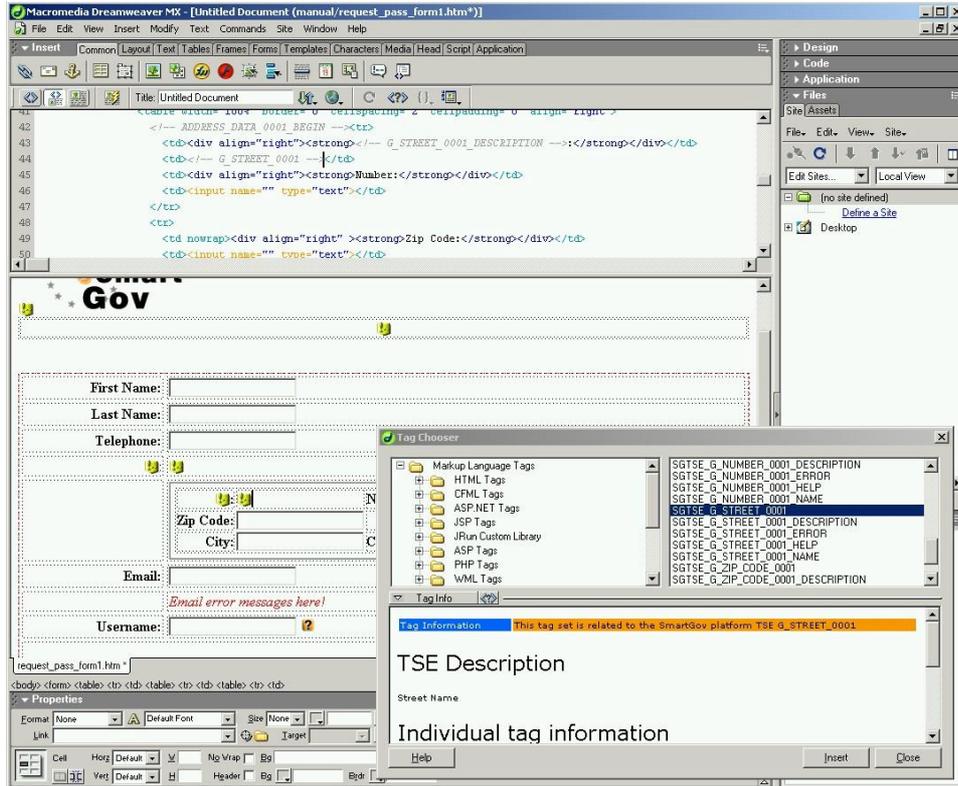


Figure 87 – Inserting the TSE tag

36. Repeat the steps 28 – 35 for the remaining TSE group elements, i.e. the "Number", "Zip Code", "Area", "City" and "Country". The TSE group area should now look as follows (Figure 88).

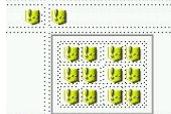


Figure 88 – TSE group area after replacing placeholders with tags

Note: Sometimes the DreamWeaver MX design view is not refreshed automatically after replacing an element with a tag, or the tags are not always visible. In this case try refreshing the design view manually selecting *View / Refresh Design View*. Alternatively, you can verify the correct tag insertion through the code view.

Now, by following a similar procedure, the remaining TSEs will be replaced.

37. Select the "First Name" label (Figure 89).

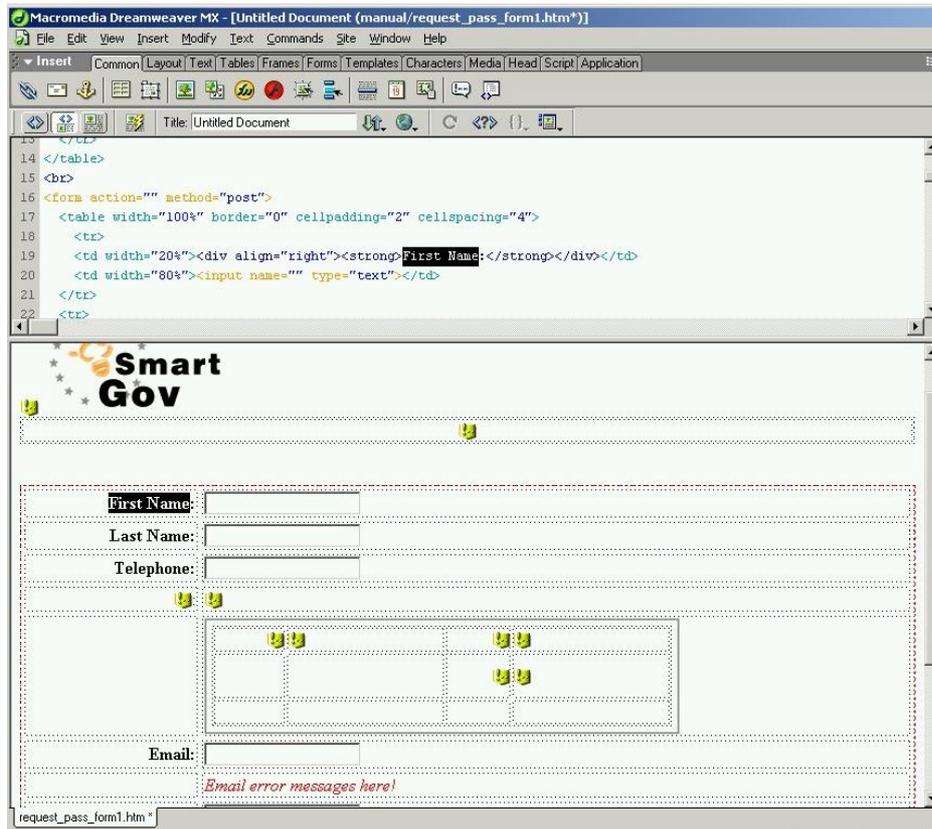


Figure 89 – Selecting the “first name” label

38. Delete the text pressing the *delete* button from the keyboard or selecting from the menu *Edit / Clear*.
39. Select *Insert / Tag*.
40. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form / Included TSEs* in the tags hierarchy. From the right pane choose the *SGTSE_T_FIRST_NAME_0001_DESCRIPTION* tag and click on the *Insert* button (Figure 90).

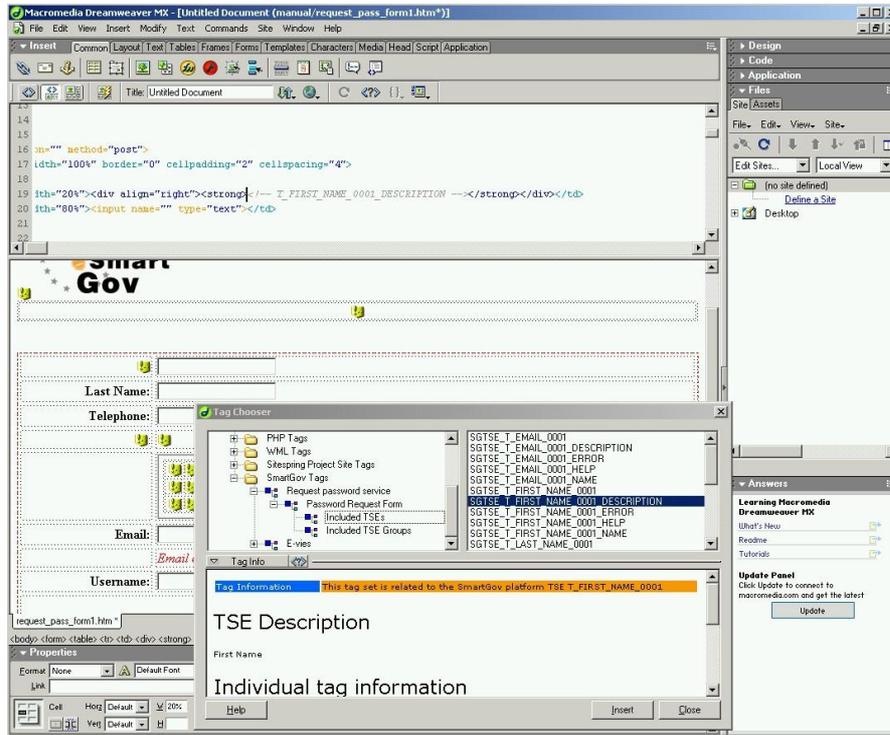


Figure 90 – Inserting the “first name description” tag

41. Select the text box indicating the space for the first name element (Figure 91).

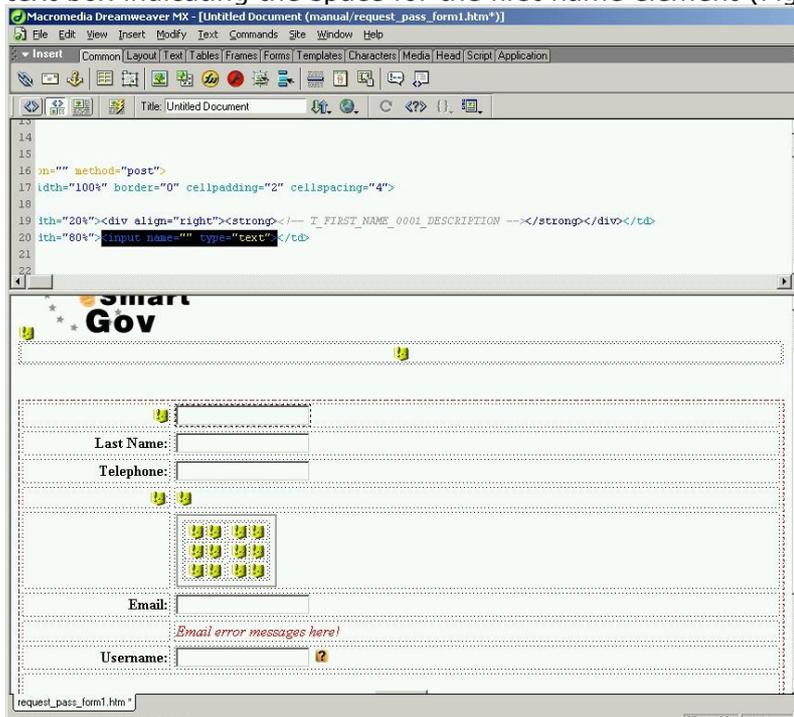


Figure 91 – Selecting the input area for the “first name”

42. Delete the text box pressing the *delete* button from the keyboard or selecting from the menu *Edit / Clear*.

43. Select *Insert / Tag*.

44. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form / Included TSEs* in the tags hierarchy. From the right pane choose the *SGTSE_T_FIRST_NAME_0001* tag and click on the *Insert* button.

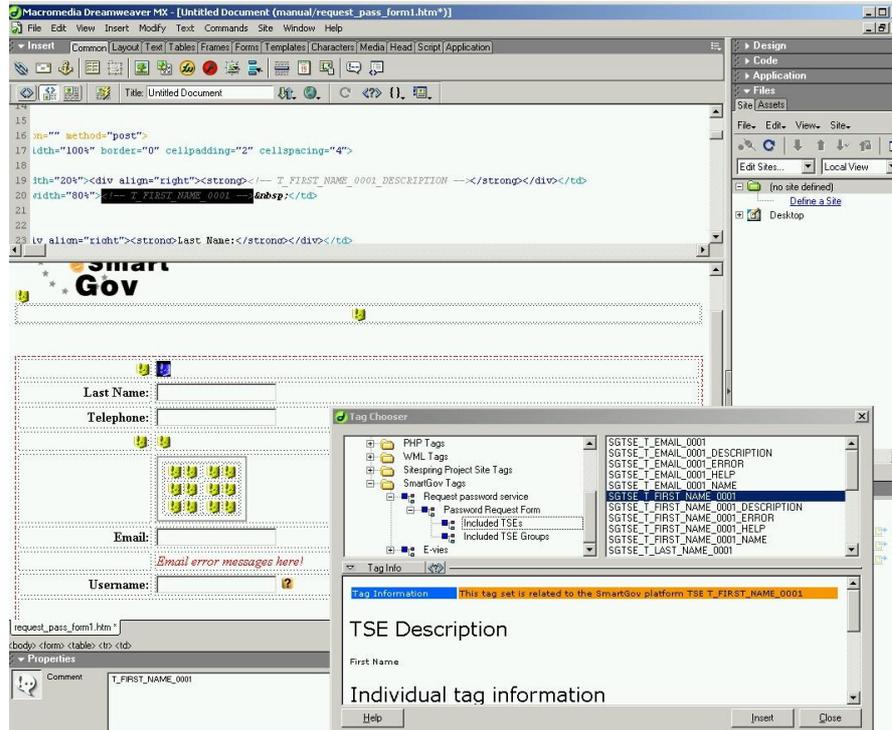


Figure 92 – Inserting the “first name” TSE

45. Repeat the steps 37 – 44 for the remaining TSE elements, i.e. the “Last Name”, “Email” and “Username”. The form should now look as illustrated in Figure 93).

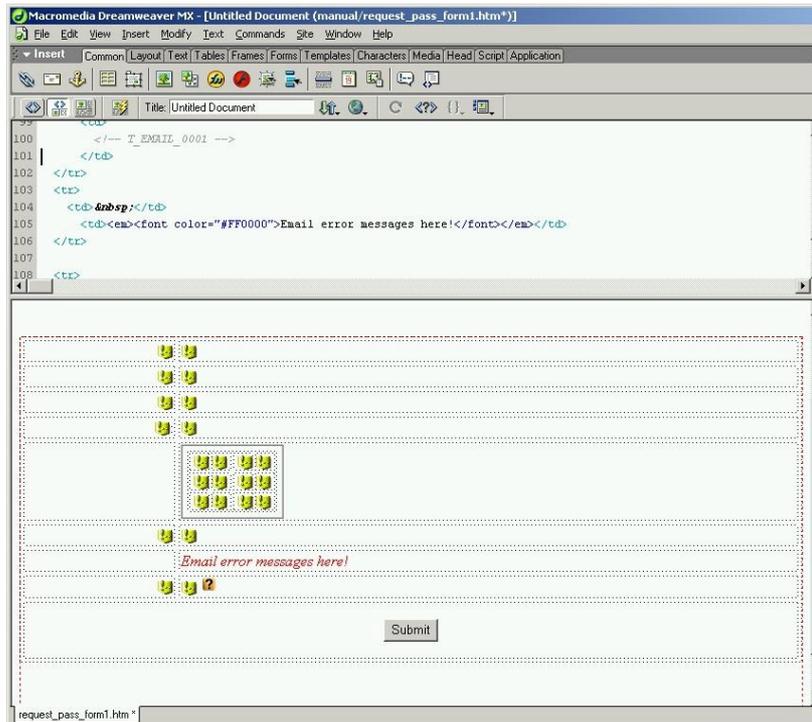


Figure 93 – Form appearance after TSE label and input area replacement

The only remaining elements to be replaced are the Username help, the E-mail error message and the Submit button. This will be accomplished in the following steps.

46. Select the text "Email error messages here!" (Figure 94).

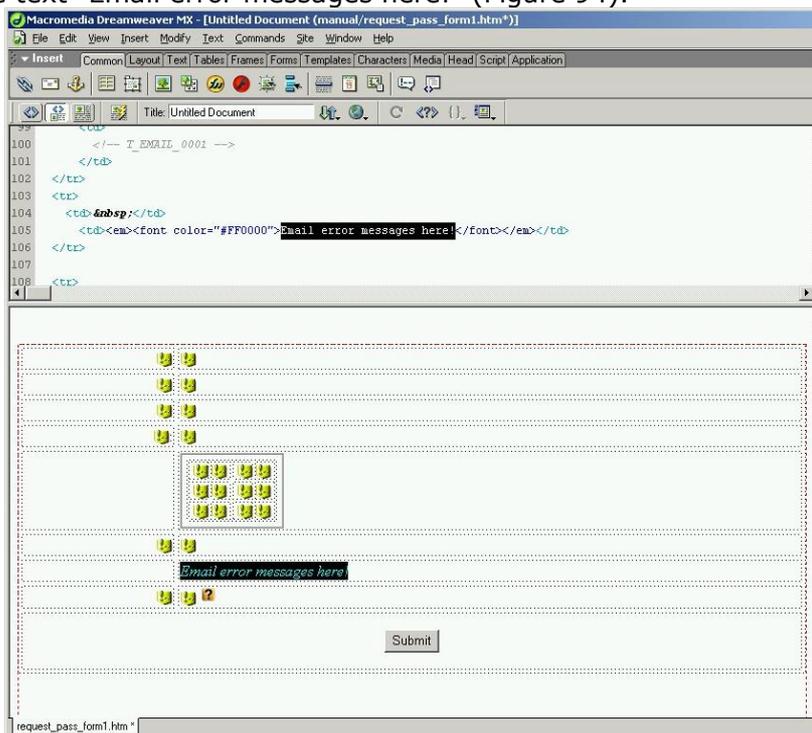


Figure 94 – Inserting the error message placeholder

47. Delete the text pressing the *delete* button from the keyboard or selecting from the menu *Edit / Clear*.
48. Select *Insert / Tag*.
49. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form* in the tags hierarchy. From the right pane choose the *SGTSE_TSE_EMAIL_0001_ERROR* tag and click on the *Insert* button.

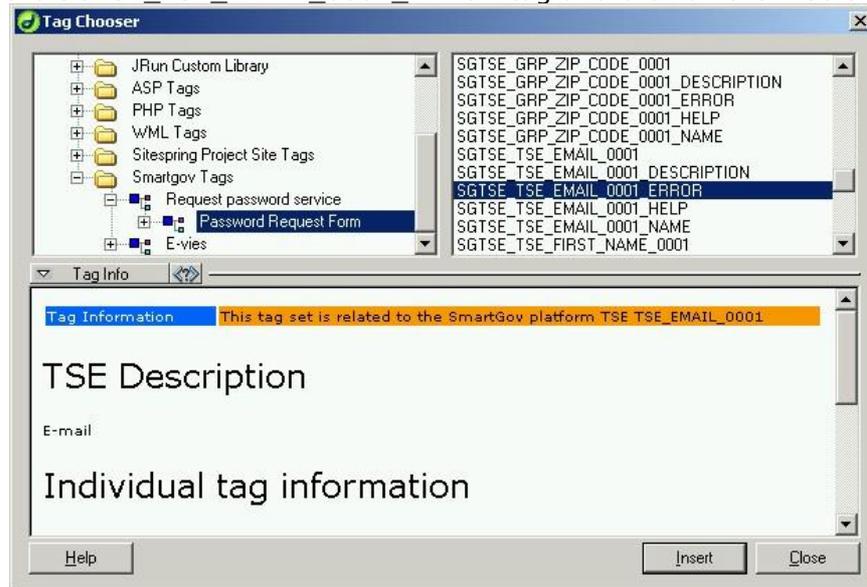


Figure 95 – Inserting the “error messages” tag

50. Select the username help placeholder icon (Figure 96).

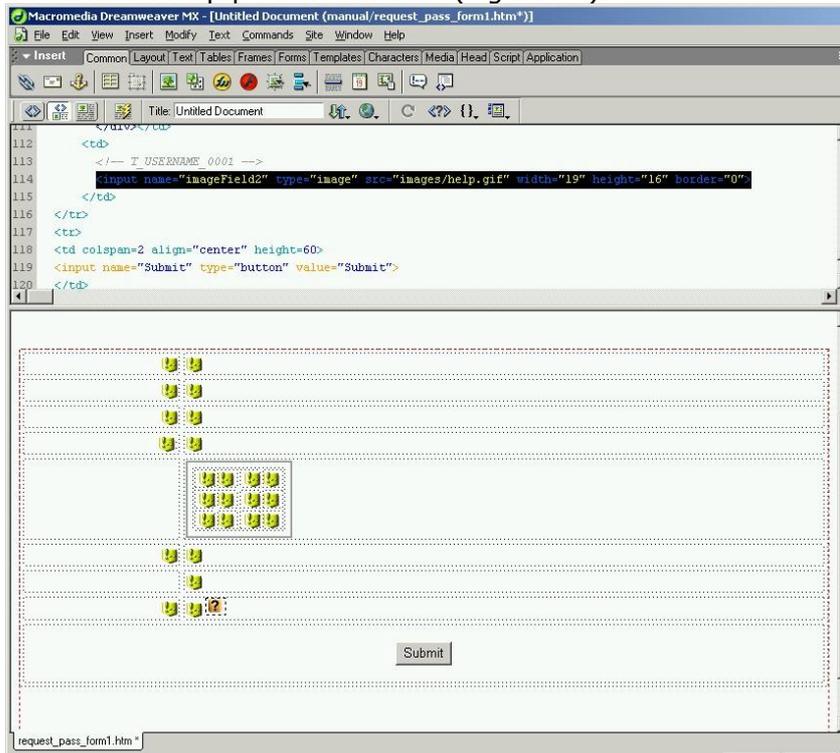


Figure 96 – Selecting the username help placeholder

51. Delete the icon pressing the *delete* button from the keyboard or selecting from the menu *Edit / Clear*.
52. Select *Insert / Tag*.
53. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form / Included TSEs* in the tags hierarchy. From the right pane choose the *SGTSE_T_USERNAME_0001_HELP* tag and click on the *Insert* button.
54. Select the Submit button (Figure 97).

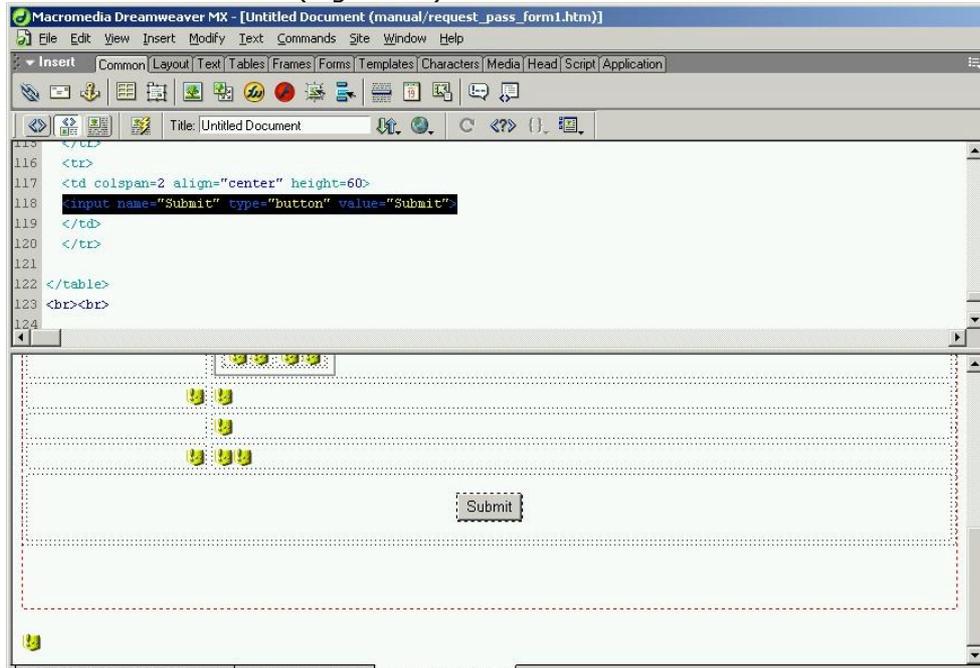


Figure 97 – Selecting the "Submit" button

55. Delete the button pressing the *delete* button from the keyboard or selecting from the menu *Edit / Clear*.
56. Select *Insert / Tag*.
57. In the *Tag Chooser* window navigate to the *SmartGov Tags / Request Password Service / Password Request Form* in the tags hierarchy. From the right pane choose the *SGFORM_REQUEST_PASSWORD_FORM_NEXT* tag and click on the *Insert* button (Figure 98).

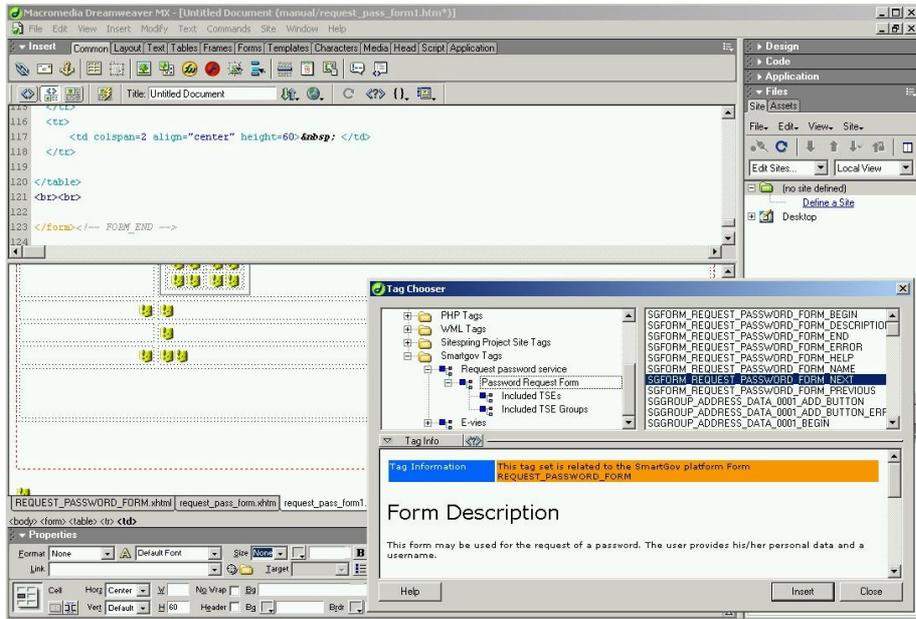


Figure 98 – Inserting the “next form” button

58. Click OK on the *Tag Editor / Input* window that appears without changing the default settings.

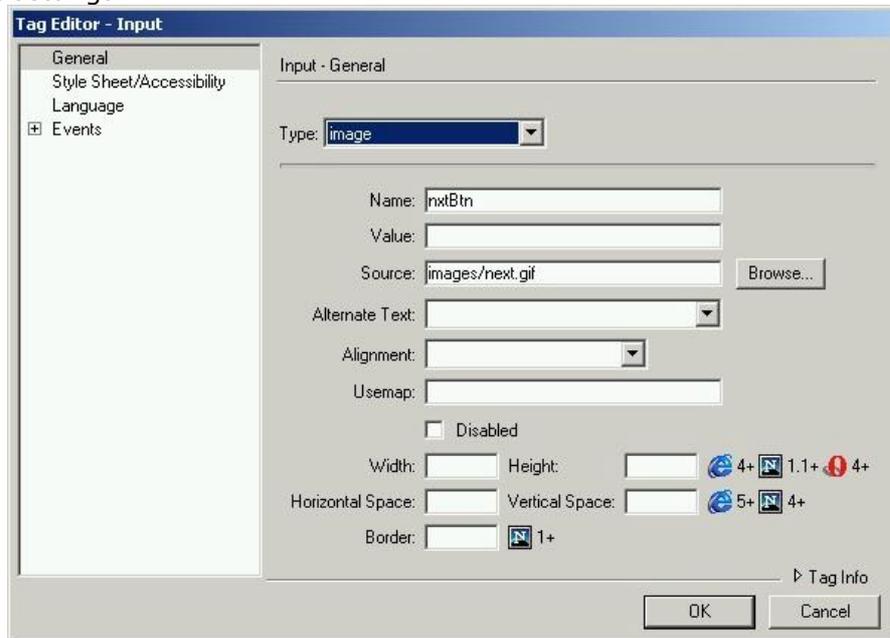


Figure 99 – “Tag editor – input” window

59. Now the form should contain only the tags and the layout information, as all the visual elements will have been replaced by the appropriate tags. The only visible element will be the Next button icon (Figure 100).

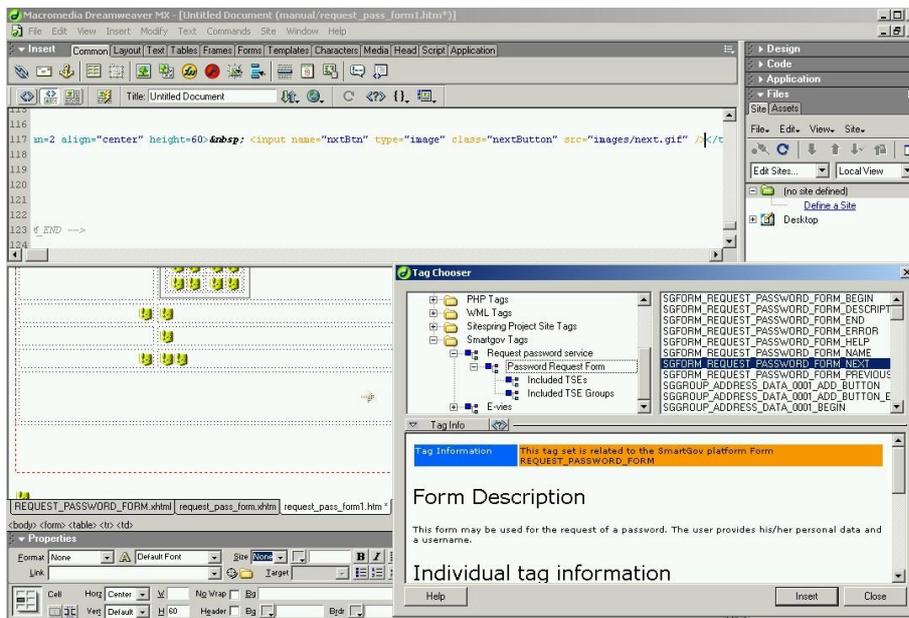


Figure 100 – Form with the “next” button

Note: The Next Icon that appears in the xhtml layout file will appear on the deployed service as well. The procedure to change this default icon is described in section 8.1 Changing the default button icons.

Note: If you used a form as a design element, delete the opening and closing form tags. These tags are visible in *code view* only.

60. In Code View, select the form opening tag and delete it (Figure 101). To easily locate it, you may search for the text `<form`

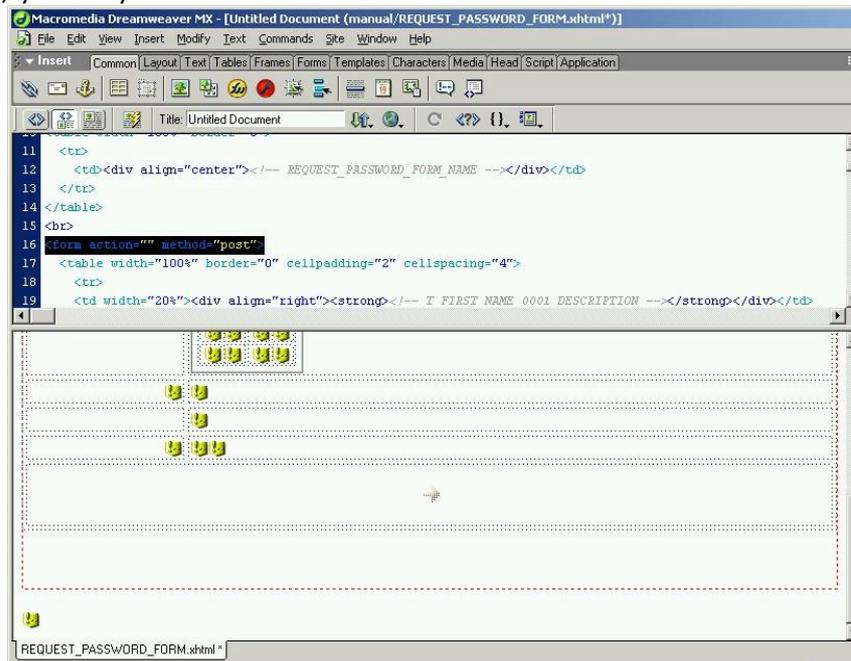


Figure 101 – Selecting the form opening tag

61. In Code View, select the form closing tag and delete it (Figure 102). To easily locate it, you may search for the text `</form>`

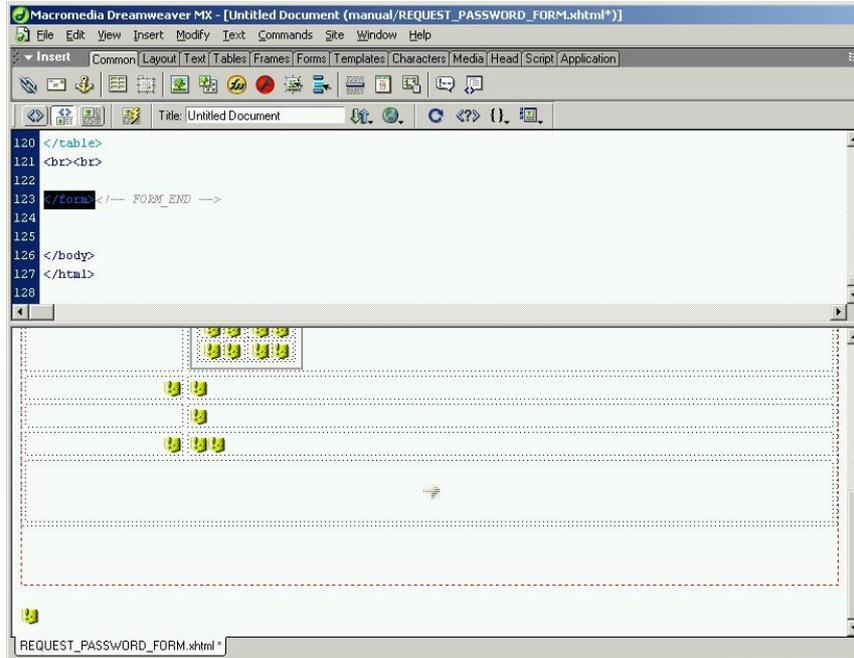


Figure 102 – Selecting the form closing tag

62. Save the form layout as an xhtml file, naming it after the form id, in this case REQUEST_PASSWORD_FORM.xhtml

Note: If the form is not named appropriately, the Integrator will fail to locate it, so double-check the spelling in this phase.

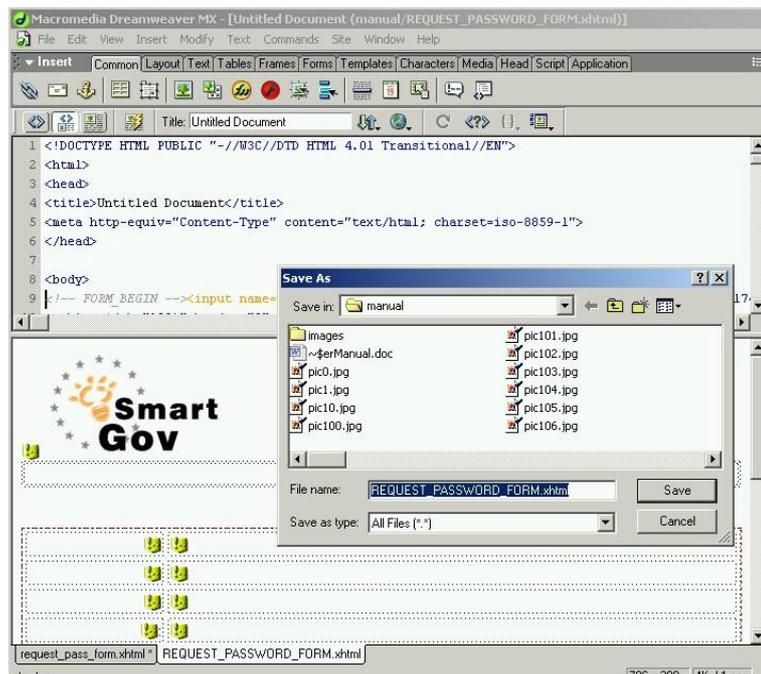


Figure 103 – Saving the form

9.3 Changing the default button icons

The SmartGov platform provides a set of icons for the Next, Previous and Help buttons appearing on the created services. These icons may be changed with the following steps:

1. Go to the Integrator installation directory and open the folder `\Integrator\static_files\Pages\images`
2. Replace the `help.gif`, `next.gif` and `previous.gif` to change the Help, Next and Previous buttons.

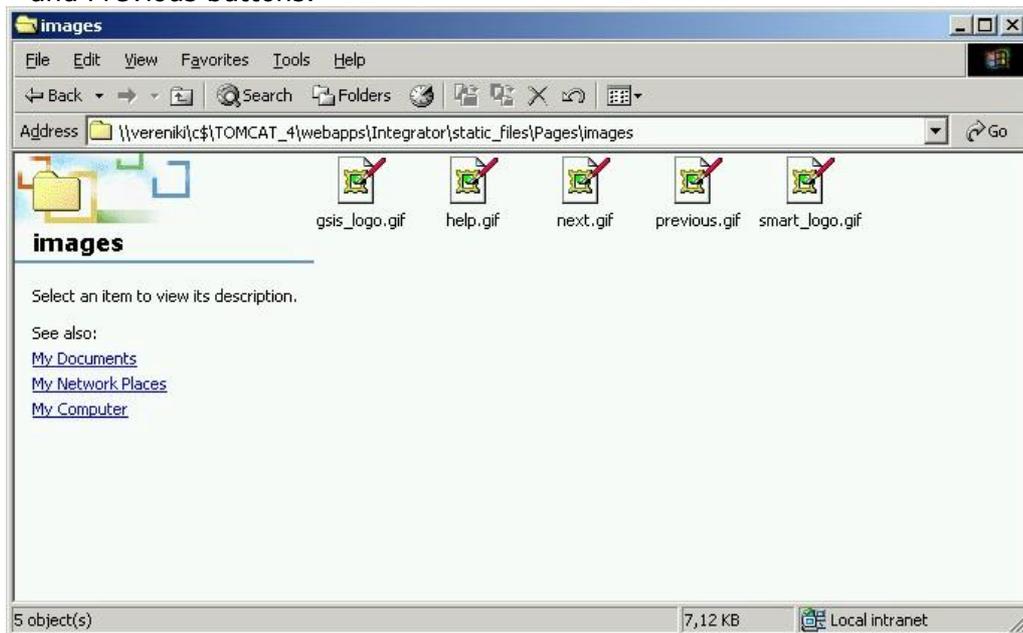


Figure 104 – The directory with the Integrator icons

9.4 Changing the default banner

The SmartGov platform provides a default banner, i.e. a layout with text and graphics that appears on every page of the deployed service. You may customise this banner to suit your organisational needs. To customise this file proceed as follows:

1. Go to the Integrator installation directory and open the folder `\Integrator\static_files\Pages` (see Figure 105).
2. Replace the file `banner.html` with a suitable, self-contained HTML file. This file is loaded in a separate frame when the end-users access the deployed service. The banner that will be used for the test service is illustrated in Figure 106.

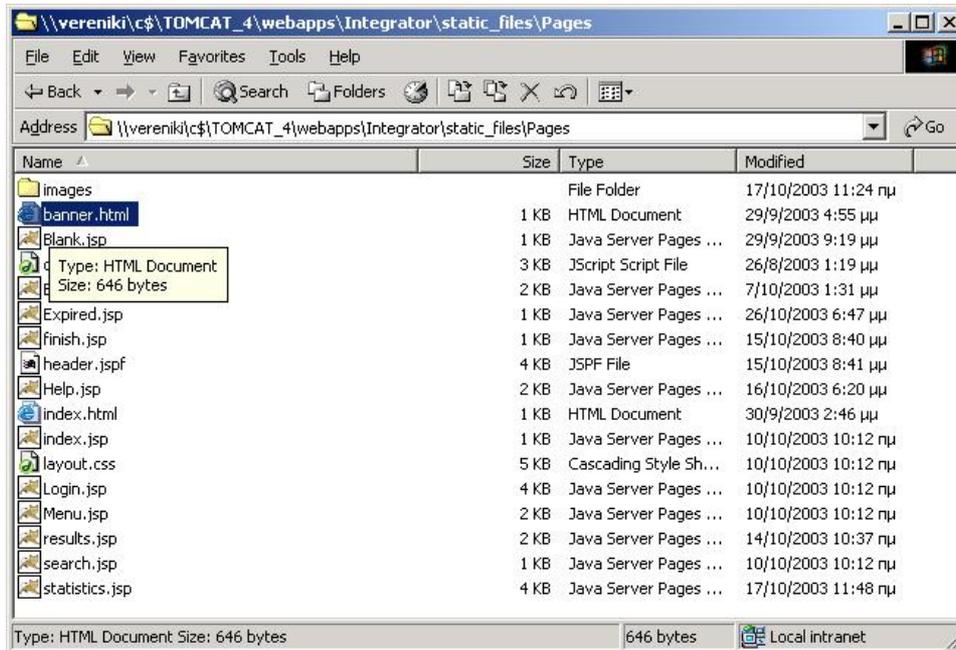


Figure 105 – The “banner.html” file

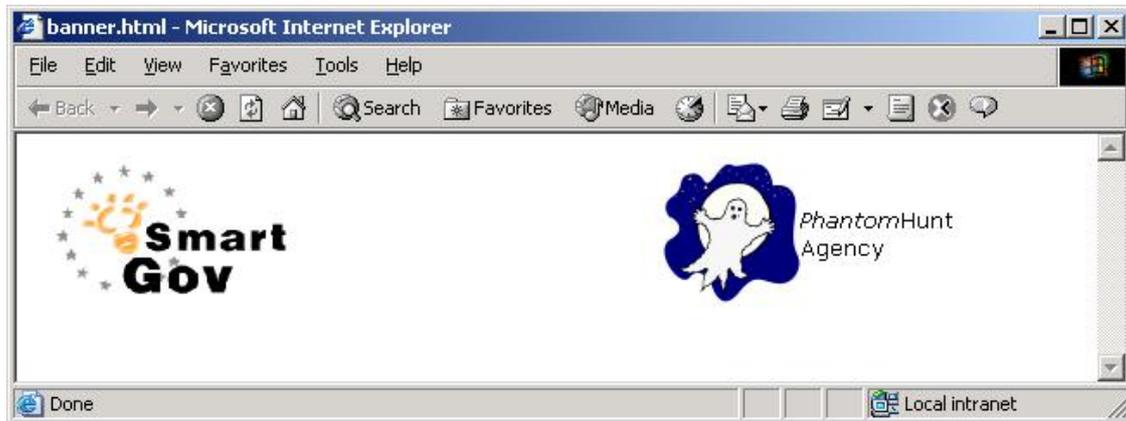


Figure 106 – Customised banner for the test service

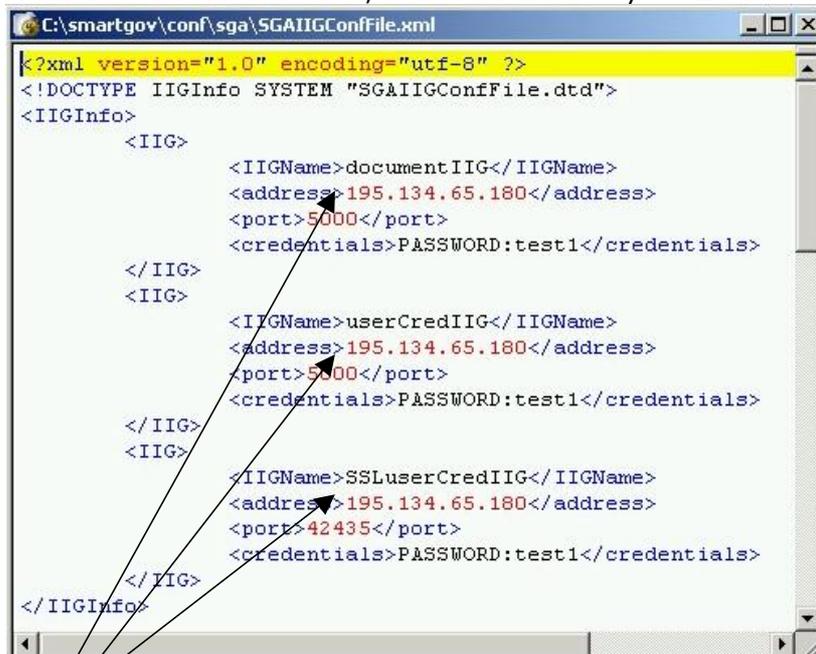
You may also want to customise the `index.html` file, in the same folder, to adjust the size of the area allocated to the banner.

10 Deploying the Service

1. The xhtml form file should be copied to the machine running the Integrator within a folder that has been specified during the Integrator installation process (default: c:\html).

Note: If this is the first service being deployed using the Integrator, the following two steps must be completed before continuing:

1. Copy the SGA_configuration.zip located in the sub-directory webapps\integrator\static_files in the Tomcat directory to the deployment server.
 2. Extract the contents of SGA_configuration.zip to the directory C:\smartgov directory of the deployment environment
2. Edit the SGAIIGConfFile.xml located in the C:\smartgov\conf\sga directory. All the address elements should be changed to the address of the machine where the IIG is running (Figure 107). You may also need to modify the port and credential elements, to match those of your IIG installation.



```
<?xml version="1.0" encoding="utf-8" ?>
<!DOCTYPE IIGInfo SYSTEM "SGAIIGConfFile.dtd">
<IIGInfo>
  <IIG>
    <IIGName>documentIIG</IIGName>
    <address>195.134.65.180</address>
    <port>5000</port>
    <credentials>PASSWORD:test1</credentials>
  </IIG>
  <IIG>
    <IIGName>userCredIIG</IIGName>
    <address>195.134.65.180</address>
    <port>5000</port>
    <credentials>PASSWORD:test1</credentials>
  </IIG>
  <IIG>
    <IIGName>SSLuserCredIIG</IIGName>
    <address>195.134.65.180</address>
    <port>42435</port>
    <credentials>PASSWORD:test1</credentials>
  </IIG>
</IIGInfo>
```

Figure 107 – Changing the “address” elements

10.1 Controlling access to the service

In order to allow users to access the service, the tables `sguserdata` and `sguserservices` must be appropriately populated. The `sguserdata` table contains authentication information about users of the deployed services, whereas the `sguserservices` table lists the services that each user (defined in the `sguserdata` table) is allowed to access. Table population may be performed by any appropriate means, i.e. interactive data insertion, batch SQL statements, synchronisation with other repositories etc. We will illustrate here table management using the MySQL-Front Tool. This procedure is described in the following paragraphs.

1. Launch the MySQL-Front tool and login to the appropriate database.

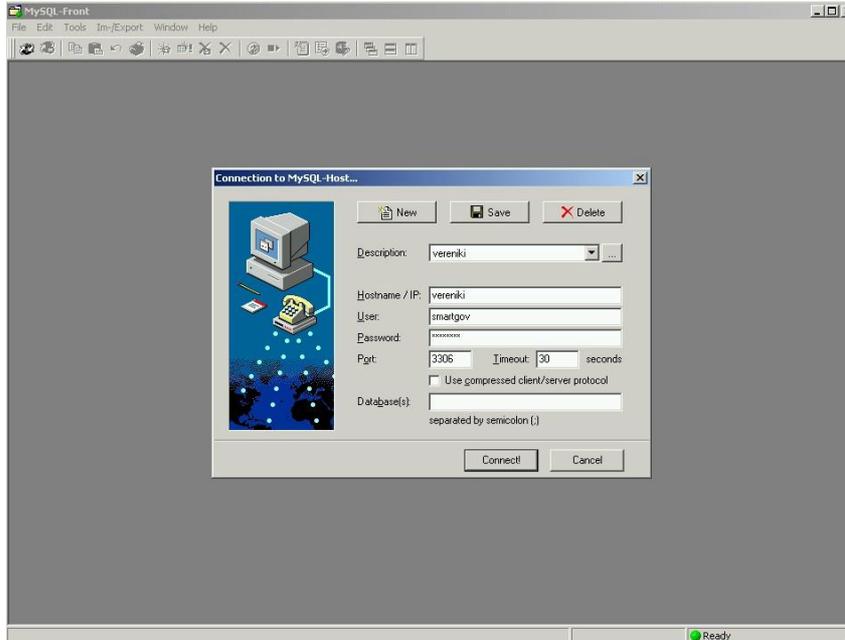
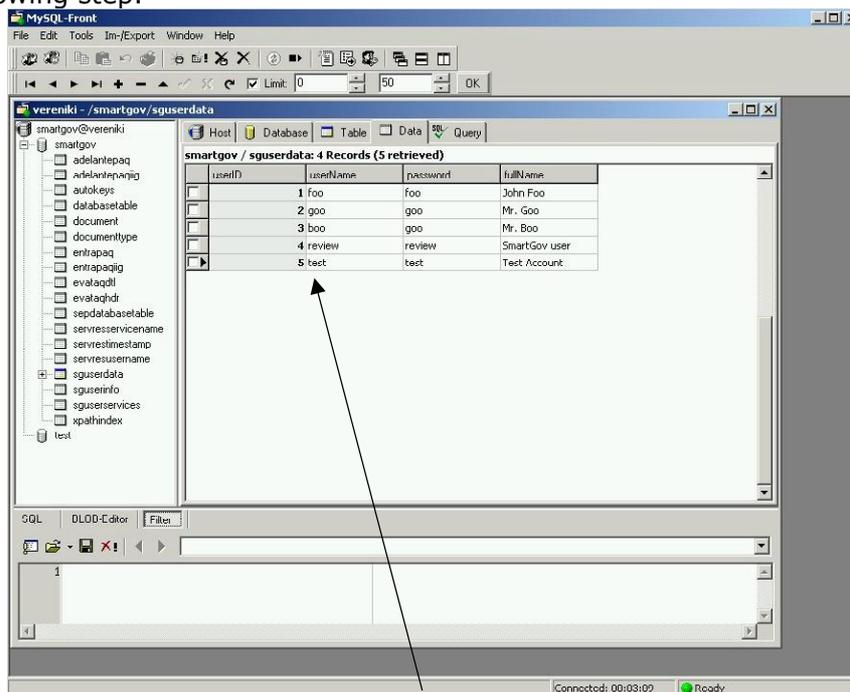


Figure 108 – Logging in to MySQL-Front

2. Create a new service user: From the left pane, expand the *Smartgov* database (clicking on the box with the cross besides the corresponding icon) and select the *sguserdata* table. Select the "Data" tab from the right pane; the table data will appear. Click in the last element of the last row, press the "tab" key and provide the userID, username, password and name of the new user (Figure 109). Note down of the user id, as it will be needed in the following step.



A new row, with data for the new user

Figure 109 – Creating a new user

- Define which services the new user may have access to: In the left pane, from the *Smartgov* database, select the *sguserservices* table. Click on the "Data" tab in the right pane; the table data appear. Click on the last element of the last row, press the "tab" key and provide the userID (in our case 5) and the service name, in our case REQUEST_PASSWORD_TS (Figure 110).

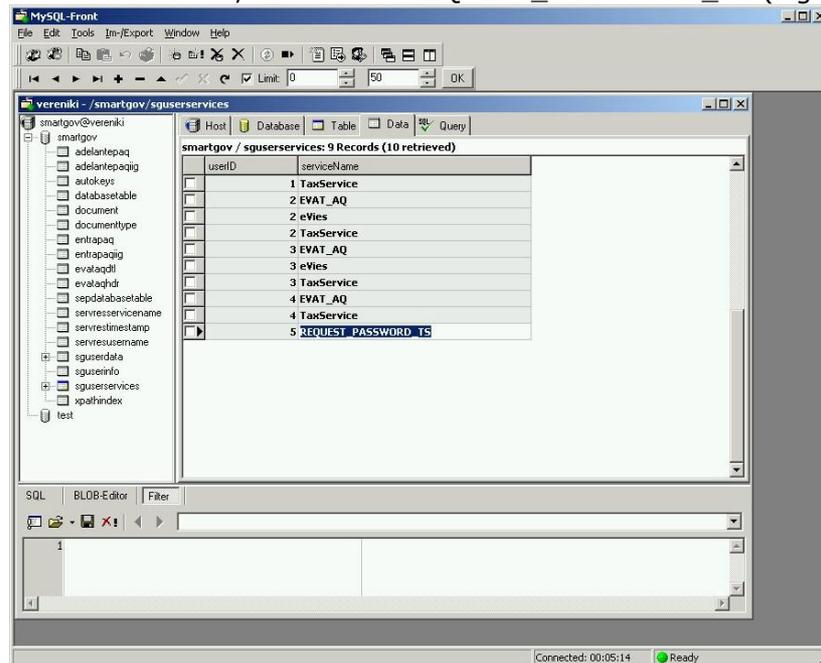


Figure 110 – Allowing the new user to access the REQUEST_PASSWORD_TS service

10.2 Running the Integrator

You are now ready to use the Integrator, which will combine all the data you have provided so far to deploy the service.

- Run the Integrator, typing its address in the address bar of your Internet browser window. In the Integrator main screen supply the Service Name, which should be the transaction service identifier, the name of the deployment server and the port on which the deployment server is listening (Figure 111). Consult the site administrator for these details. Then click *Deploy Service*.

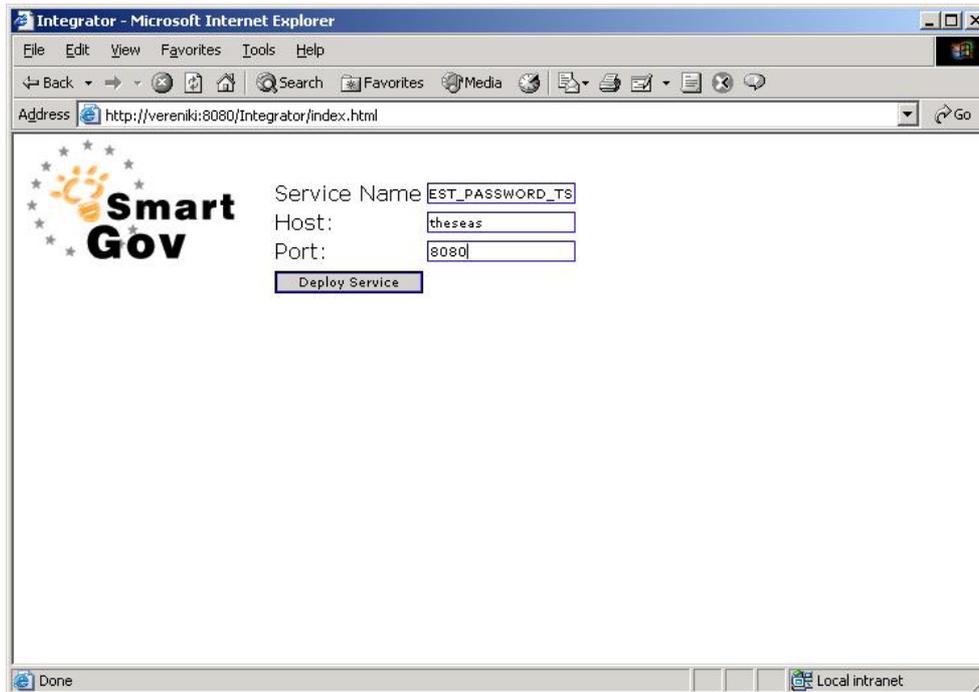


Figure 111 – Providing details to the Integrator

2. The Integrator commences the service deployment, displaying various messages. If no errors occur, a message "BUILD SUCCESSFUL" message is displayed (Figure 112).

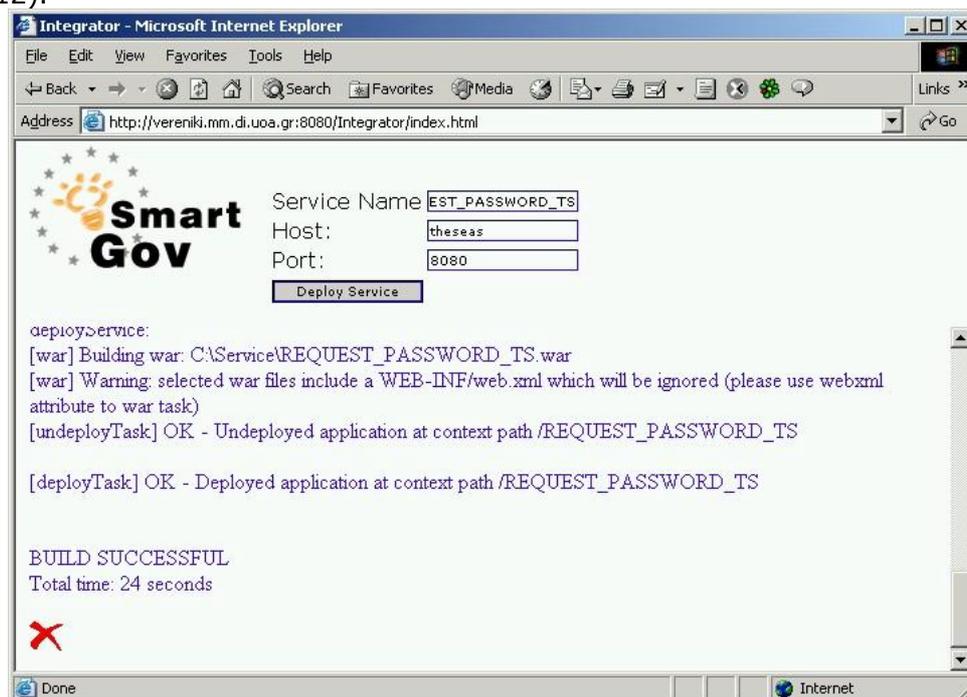


Figure 112 – Integration and deployment completed

10.3 Using the service

1. Type the URL of your new service. The URL will have the form `http://deployment_server:port/serviceId` where the `deployment_server`, `port` and `serviceId` portions are equal to the transaction service identifier, the name of the deployment server and the port provided in the integration step (see section 10.2)
2. A login screen appears. Provide the username and password you have defined in section 10.1 and press *Submit*.

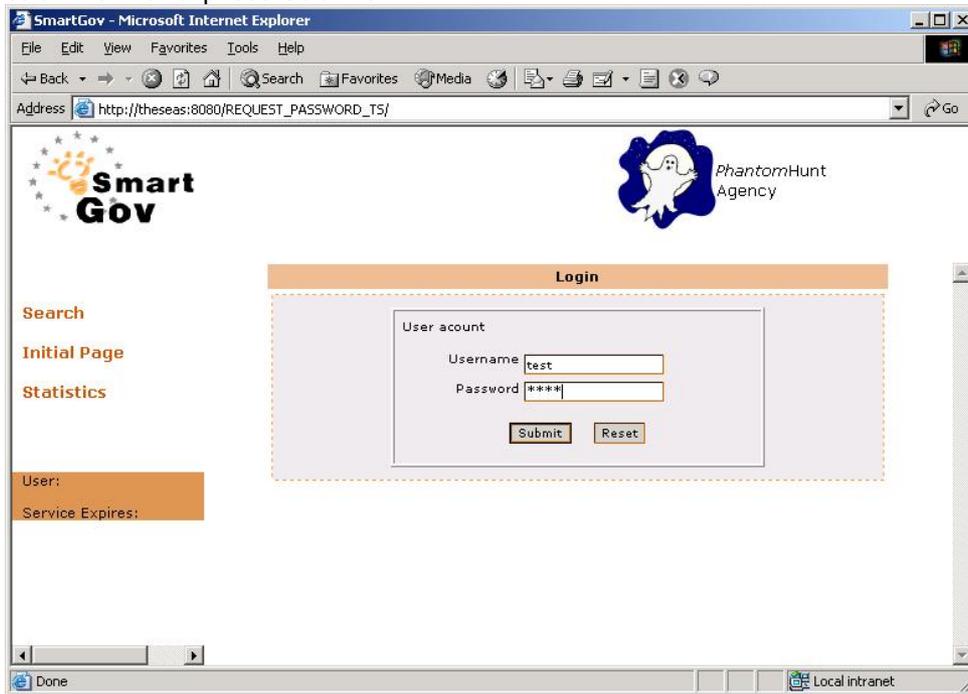
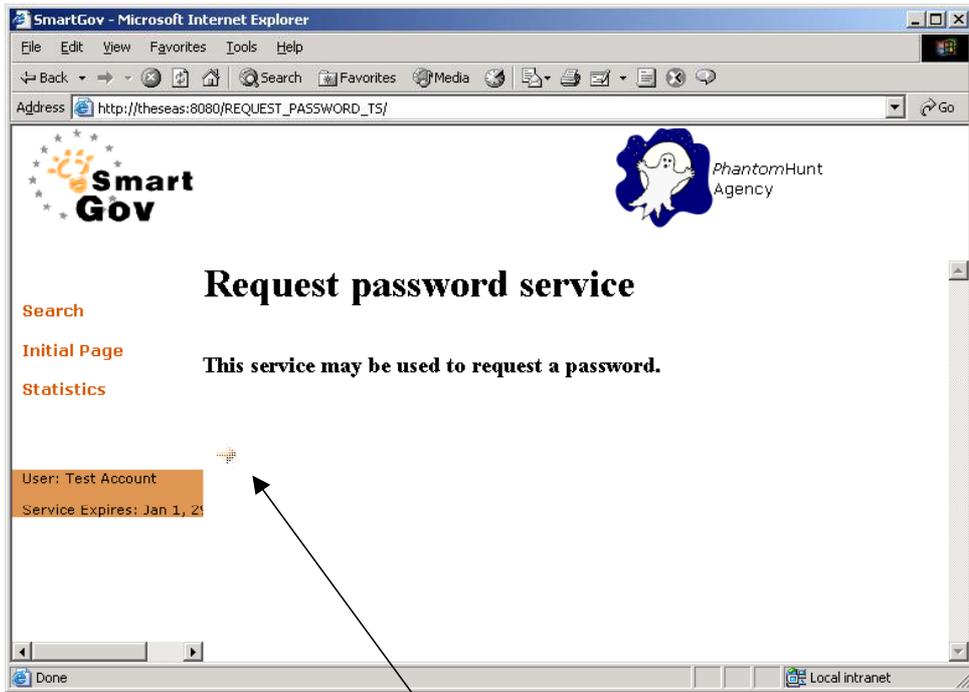


Figure 113 – Login screen for the service

3. The initial screen of the Request Password service appears (Figure 114). Click on the arrow to move to the next screen.



"Next form" arrow

Figure 114 – Initial screen for the service

4. Fill in the form with your personal data (Figure 115).

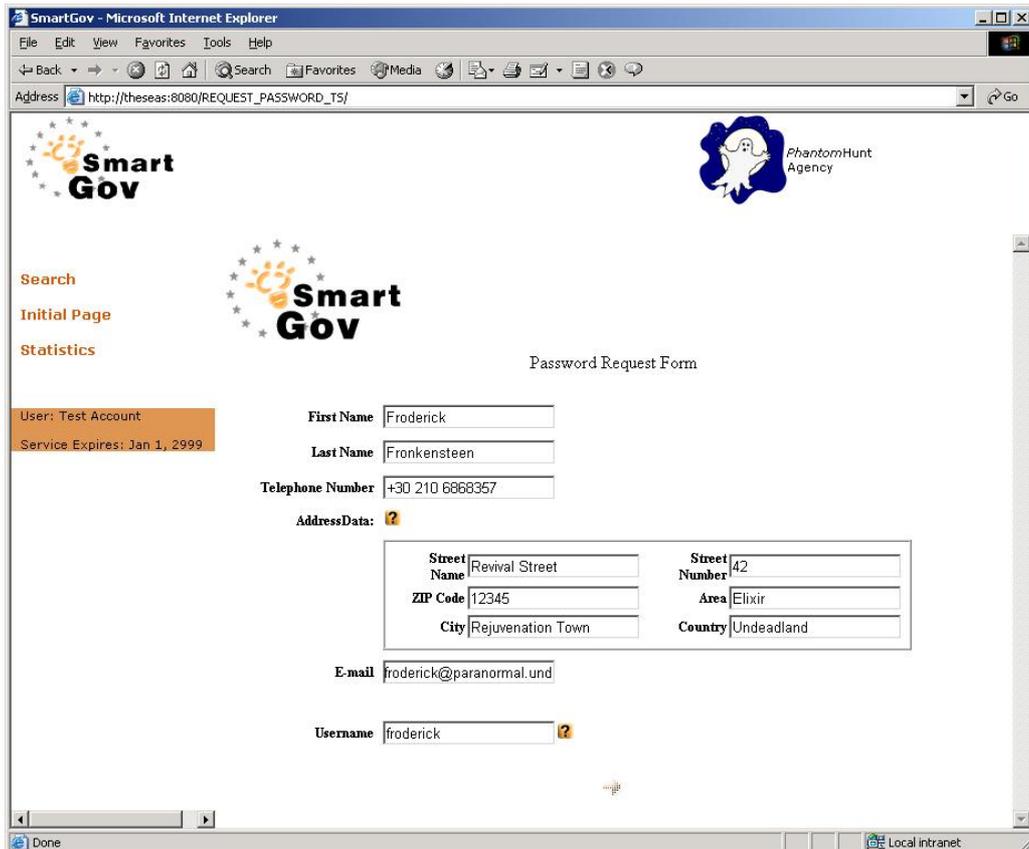


Figure 115 – Providing input to the form

5. Click on the help icons to view the available help. If you click on the help icon, a help message appears in a separate window (Figure 116).

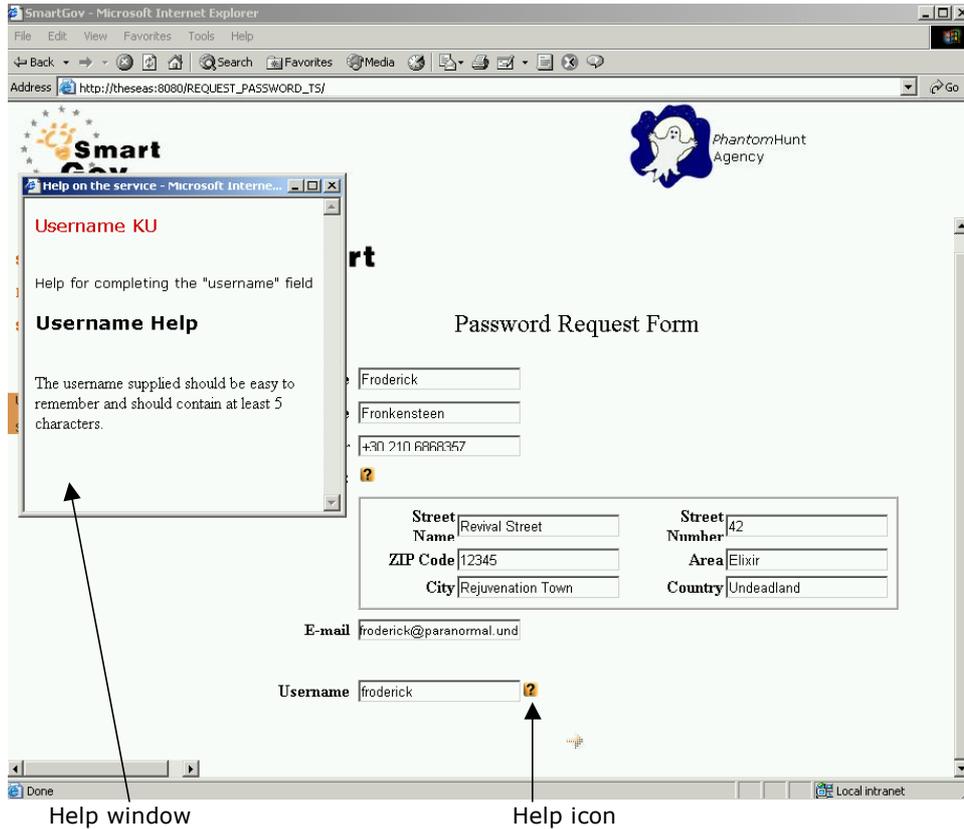


Figure 116 – Accessing help

6. Click on the "Next" arrow to submit the data.
7. You may click on the *Search* link at the left hand-side of the screen to open the Search screen where you can retrieve documents previously submitted (Figure 117).

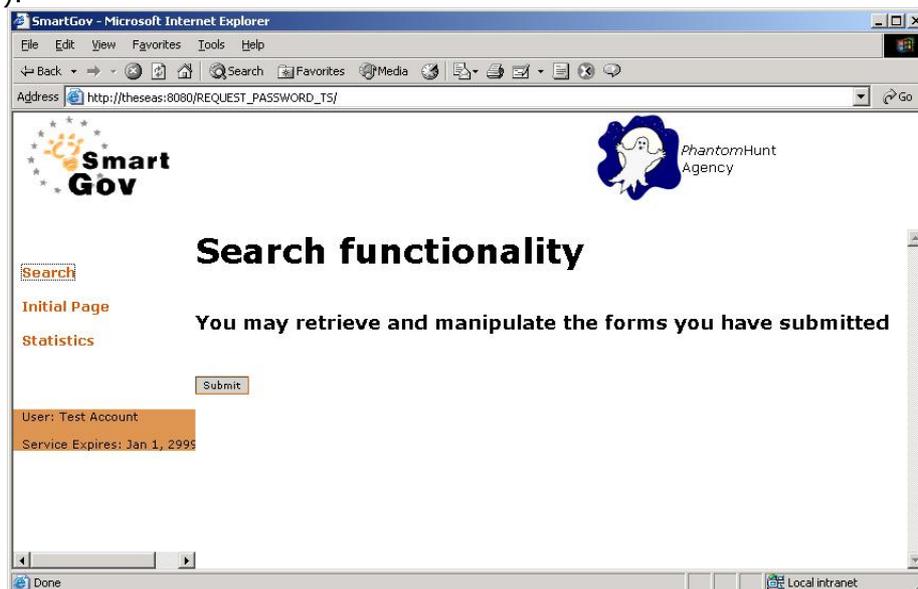


Figure 117 – Search functionality

8. Click *Submit* to continue to the main search page.

- Select the submission you are looking for from the drop down list (documents are sorted by submission time, starting from the oldest one and moving down towards the most recent).

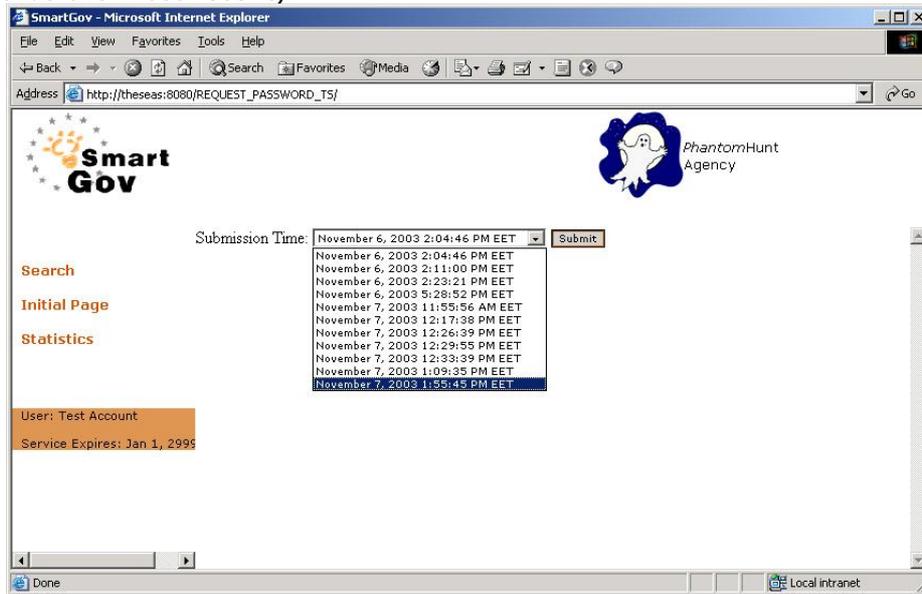


Figure 118 – Selecting a document from the list

- Click on *Submit*. The data previously entered and submitted appears (Figure 119).

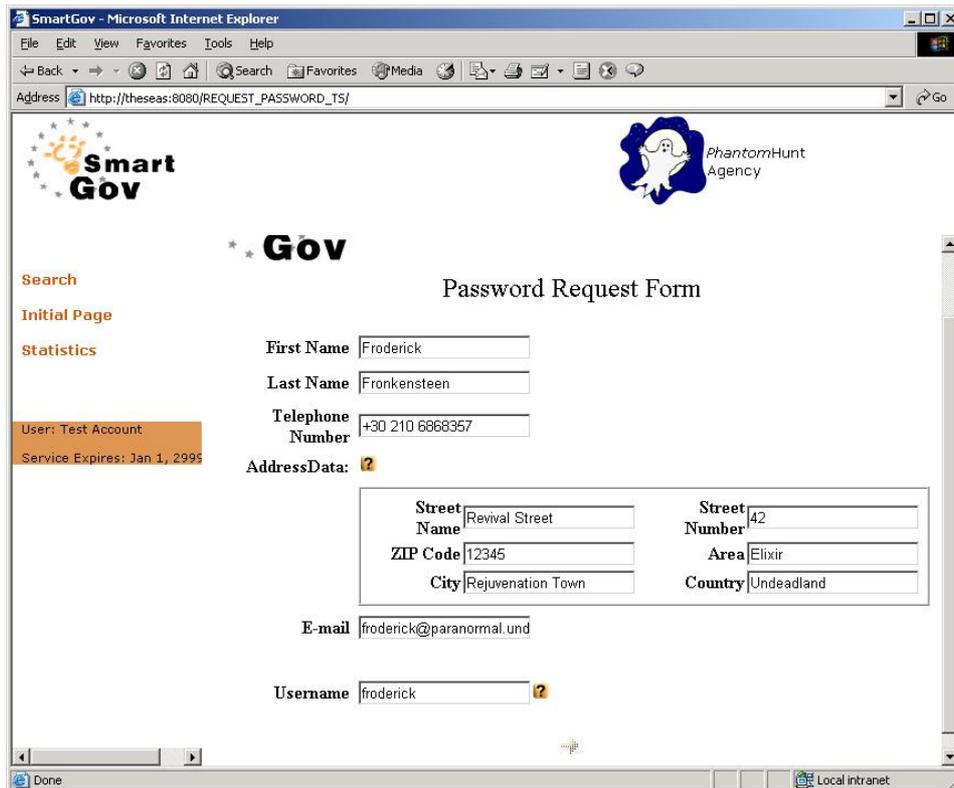


Figure 119 – Viewing a previous submission

11. If desired, the user may change the data entered and resubmit the form (by pressing the "next" button). In this case, a new version of the document is created.