CHAPTER 5

SOLUTION IMPLEMENTATION

5.1 Implementation Strategy

In order to develop the system, the author used a lot software tools and hardware

with certain specification. The software tools that the author used are:

- Microsoft Windows XP Professional Service Pack 2 as the operating system.
- Microsoft Office Word XP 2002
- Microsoft Office Excel XP 2002
- Microsoft Office Vision 2003
- Microsoft Office Front Page XP 2002
- Macromedia Dreamweaver MX 2004
- Microsoft Notepad
- VertrigoServ 1.20
 - o Apache
 - o MySQL 3.23.47[2]
 - PHPMyAdmin 2.6.3-pl1[3]

Also, the hardware that is used in developing the system:

- Notebook with the necessary specification of:
 - Intel Centrino Core 2 Duo 1.66 MHz
 - RAM DDR2 512 MB

- Personal Desktop Computer with the necessary specification of:
 - Intel Pentium 4 LGA 2.66 MHz
 - RAM DDR1 1024 MB

In order to operate the system well, there is only one requirement that need to be fulfilled: any working computer that can connect to internet. The web-based tracking system provides great flexibility and easiness. The system can be accessed from anywhere with just internet connection.

5.2 Testing Implementation

The testing method that will be used to test the system is by using precondition and post condition testing method. It means, the author will input certain command to the system, and the result will be recorded, whether it return the correct result or not. This method of testing is also known as black-box testing. This mean the main point of the testing is to find out the result.

No.	Testing Category	Pre Condition (Input)	Post Condition (Result)	Remark
1	Home Page	Open the homepage	Home Page opened	ОК
2	Home Page Components	Open the homepage	Complete Home Page displays and links	ОК

Table 5.1 Black Box	System 1	Festing Table an	d the Results.
---------------------	----------	-------------------------	----------------

	Testing				
No.	Category	Pre Condition (Input)	Post Condition (Result)	Remark	
	Home Page		"Berita dan Kabar" shown		
	-			OK	
3	Components	Open "Berita dan Kabar"	properly	OK	
4	Home Page	Open "Profil Perusahaan"	"Profil Perusahaan" shown	ОК	
	Components		properly		
	Home Page	On an IIT anton a Kansill	"Tentang Kami" shown	01/	
5	Components	Open "Tentang Kami"	properly	OK	
	Home Page		"Hubungi Kami" shown		
6	Components	Open "Hubungi Kami"	properly	OK	
	Tracking		F F		
_	_	Open Tracking System	Tracking System	014	
7	System Home	Homepage	homepage shown properly	OK	
	Page				
	Tracking	Input Tracking "ID	Tracking result shown		
8	System Home		_	ОК	
	Page	Pengiriman"	perfectly		
	Tracking				
9	System Home	Cancelling input of "ID	Input deleted	ОК	
	Page	Pengiriman"			
	Tracking				
40		l a sin inte de successo d		OK	
10	System Home	Login into the account	Login successful	OK	
	Page				
	Tracking	Clearing Login information			
11	System Home		Login information cleared	OK	
	Page	with cancel button			

Testing				_
No.	Category	Pre Condition (Input)	Post Condition (Result)	Remark
	Tracking	Login into the account with		
12	System Home	wrong username or	Cannot login and back to	ОК
	Page	password	the homepage	
			Show: Input Pengiriminan	
			baru,	
			Update posisi pengiriman,	
10			Tambah Destination,	211
13	Login feature	Admin's login	Lihat Laporan pengiriman	ОК
			yang sedang dikirim,	
			Lihat Laporan pengiriman	
			yang telah terkirim.	
			Show: Input Pengiriminan	
14	Login feature	Employees' Login	baru and	ОК
			Update posisi pengiriman.	
15	Admin's Login	"Input Pengiriman Baru"	Go to input new entry page	ОК
16		"Update Posisi	Go to update shipment	ОК
10	Admin's Login	Pengiriman"	position page	ŬŔ
17	Admin's Login	"Tambah Destination"	Go to add destination page	ОК
18	Admin's Login	"Lihat Laporan pengiriman	Go to the report generator	ОК
10		yang sedang dikirim"	on sending shipment page	ÖK
19	Admin's Login	"Lihat Laporan pengiriman	Go to the report generator	ОК
19	Autim S LUgiti	yang telah terkirim"	on sent shipment page	UK
20	Admin's Login	Log Off	Back to Home Page	ОК
		1	1	

No.	Testing	Pre Condition (Input) Post Condition (R		Remark
NO.	Category	Fre Condition (input)	Post Condition (Result)	Relliark
	Admin's "Input			
21	Pengiriman	Input the form with unique	Input saved	ОК
	Baru"	shipment ID		
	Admin's "Input			
22	Pengiriman	Input the form with used	return error due to used ID	ОК
	Baru"	shipment ID		
	Admin's		Result is shown on the	
23	"Update Posisi	Input the the Shipment ID		ОК
	Pengiriman"		screen	
	Admin's	Input a new destination		
24	"Tambah	and the ID	Input saved properly	ОК
	Destination"			
	Admin's "Lihat			
	Laporan			
25	pengiriman	Show the report	Report shown properly	ОК
	yang sedang			
	dikirim"			
	Admin's "Lihat			
	Laporan	Sort the report by	Report Sorted by Shipment	
26	pengiriman	Shipment ID	ID	ОК
	yang sedang	Chipmon		
	dikirim"			

No.	Testing D. Pre Condition (Input)		Post Condition (Result)	Remark
NO.	Category	Fre Condition (input)	Fost Condition (Result)	Kelliark
	Admin's "Lihat			
	Laporan			
27	pengiriman	Sort the report by Origin	Report Sorted by Origin	ОК
	yang sedang			
	dikirim"			
	Admin's "Lihat			
	Laporan	Sort the report by	Report Sorted by	
28	pengiriman	destination		ОК
	yang sedang	destination	destination	
	dikirim"			
	Admin's "Lihat		Report Sorted by sender name	
	Laporan	Sort the report by sender		ОК
29	pengiriman	Name		
	yang sedang	Name		
	dikirim"			
	Admin's "Lihat			
	Laporan	Sort the report by shipment	Report Sorted by Shipment date	
30	pengiriman	date		OK
	yang sedang			
	dikirim"			
	Admin's "Lihat			
	Laporan		Report shown properly	ОК
31	pengiriman	Show the report		
	yang telah			
	dikirim"			

No.	Testing	Pre Condition (Input)	Post Condition (Result)	Remark
NO.	Category		Post Condition (Result)	Kellark
	Admin's "Lihat			
	Laporan	Sort the report by	Report Sorted by Shipment	
32	pengiriman	Shipment ID	ID	ОК
	yang telah	Shipment iD	U	
	dikirim"			
	Admin's "Lihat			
	Laporan			
33	pengiriman	Sort the report by Origin	Report Sorted by Origin	ОК
	yang telah			
	dikirim"			
	Admin's "Lihat		Report Sorted by destination	
	Laporan	Sort the report by		ОК
34	pengiriman	destination		
	yang telah	destination		
	dikirim"			
	Admin's "Lihat			
	Laporan	Sort the report by sender	Report Sorted by sender	
35	pengiriman	Name	name	ОК
	yang telah			
	dikirim"			
	Admin's "Lihat			
	Laporan	Sort the report by shipment	Report Sorted by Shipment date	ОК
36	pengiriman	date		
	yang telah			
	dikirim"			

No.	Testing Category	Pre Condition (Input)	Post Condition (Result)	Remark
37	Employees' Login	"Input Pengiriman Baru"	Go to input new entry page	ОК
38	Employees' Login	"Update Posisi Pengiriman"	Go to update shipment position page	ОК
39	Employees' "Input Pengiriman Baru"	Input the form with used shipment ID	return error due to used ID	ок
40	Employees' "Update Posisi Pengiriman"	Input the the Shipment ID	Result is shown on the screen	ок
41	Employees' Login	Log Off	Back to Home Page	ОК

5.3 Implementation Procedure (Documentation)

3 :: P.N. Marga Jaya Tracking System: - Nicrosoft Internet Explorer	
Die Got jien Nevartes Jack Beb	4
🔾 Bad + 🔘 🖹 🗟 🐔 🔎 Bard 🔆 Trivits 🥑 😥 🎍 🖩 + 🗾 🎠 🚀 🕮 🦓	
Ağlının 🜒 http://localhott./radingoysten/	👻 💽 Go 🛛 Lettar "
Pengangkutan Nasional P.N. Marga Jaya Ji. Demara no. 1AA Telp. (061) 611007 - 613107 Fex. 619741 Medan Ji. Raya Pluit Selatan Komplek Ruko Pluit Meli Biok A No. 1 Telp. (021) 6621023 - 6621024 - 6832038 Fax. 6613715 Jakarta Utara	
Tracking System Home	
Track Penginaan Paket Berita dan Kabar D Penginaan Subarit Rusat	
<u>Profil Pennshaan</u> User Login	
Tentang Kami Login username pasaward Login Roset	
Hatonal Kami	
@] 2016	🖉 Local intranet

Figure 5.1 Home Page

This is the tracking system home screen. User can input ID pengiriman into the form (even without login). If the shipment is exist, then it will show something such as "Posisi pengiriman and a saat ini dari **Lampung** menuju **Padang**" and "**Pengiriman** and a akan tiba dalam waktu 9 hari as shown in figure 5.2

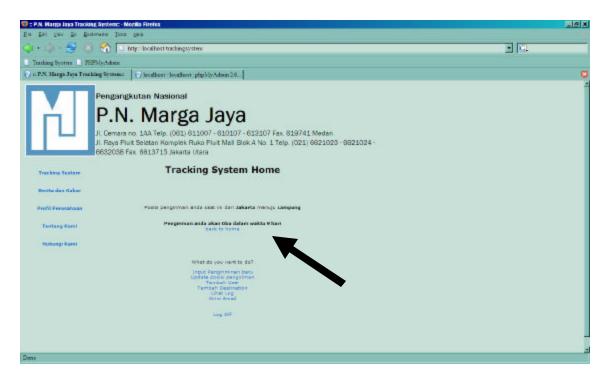


Figure 5.2 The exist shipment

If the shipment isn't exist, then it will show "Pengiriman tidak ditemukan. Harap periksa ulang kode pengiriman anda.", as shown in figure 5.3

	ng System: - Hicrosoft Internet Explorer	- I T 🛛
Die Odt Ben Myorites 3		4
G tech + 🔘 📓 🔒	🕻 🕼 🔎 Search 📌 Transics 🚱 🙆 - 🍛 📓 - 🔜 🎠 🌾 🛍 🖄	
Aginere 🔬 http://localhoet/tradin	çojdari(🖌 💽 Go 🛛 Letta 🐂
	Pongangkutan Nasional	1
	P.N. Marga Jaya	
	II. Cemara no. 1AA Telp. (061) 611007 - 610107 - 613107 Fax. 619741 Medan II. Raya Pluit Selatan Komplek Ruko Pluit Mali Biok A No. 1 Telp. (021) 6621023 - 6621024 - 3632038 Fax. 6613715 Jakarta Utara	
Tracking System	Tracking System Home	
<u>Berita dan Kabar</u>	Pengiriman tidak ditemakan. Harap periksa ulang kode pengiriman anda. Kilik <u>disini</u> untuk memarukkan kembali kode pengiriman anda	
Profil Perurahanan	User Login	
Tentang Kami	User Login Login persword: [Login] Roset	
Hubunai Kami		
Dans		Locs intransc

Figure 5.3 Non-existent shipment

However, figure 5.4 will be shown if the delivery is succeeded and reached the destination already by showing the message: "Pengiriman and a telah sampai di tujuan"

🗃 :: P.N. Harga Jaya Tracking System: - Nicrosoft Internet Explorer		- T T X
Die Got jien Myvantes jack beis		
Good - 🔘 🖪 🗹 🔎 Scord: 📌 Trivita 🥝 🙆 🐁	副・🔜 除 🦗 🏭 🚳	
Ağı'nın 🜒 http://localhost/tradlingoystern/	M 🖸	Go Lets "
Pongangkutan Nasional		1
P.N. Marga Jaya		
JI. Demara no. 1AA Telp. (061) 611007 - 610107 JI. Raya Pluit Selatan Komplek Ruko Pluit Mell B 6632038 Fax: 6613715 Jakarta Utara		
Tracking Syste	n Home	
Pengiriman anda telah sam Berita dan Kabar	ei di tujuan	
back to home		- 1
Profi Penankaan		
User Logia		
Trailing Kami Login username passwo [Login] Rose	đ	
Hitbooal Kanoi		
2 Dave	Second and a second	yrat 🖓

Figure 5.4 Reached Destination Shipments

If the user login correctly, then the user will be brought to a new menu, depending on the users. Administrator will be brought to the figure 5.5 screen

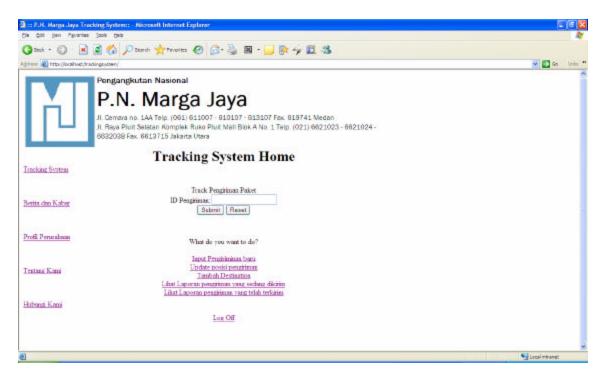


Figure 5.5 Administrator's page of features

While employees of certain shipping point will be shown figure 5.6 screen, due to some of the limited features that can be accessed by the certain shipping point employees

🗿 :: P.N. Marga Jaya Tracking System: -	Nicrosoft Internet Explorer	
Die Oot Den Merantes Jook Beb		A7
🔇 tech + 🔘 🗟 🐔 🔎	zendi 👷 Frivitz 🚱 🙆 - 📴 🎘 🍕 - 🔜 🎼 🍫 🛍 🚳	
Ağılman 🌒 https://localhoet/tradingoyetem/		💌 💽 Go 🛛 Letta 🤎
P.N. J. Cemara n J. Baya Plui	Rutan Nasional Marga Jaya 10. 1AA Telp. (061) 611007 - 810107 - 613107 Fax. 819741 Medan 1. Selatan Komplek Ruko Pluit Meli Biok A No. 1 Telp. (021) 6621023 - 6821024 - 10. 6613715 Jakarta Utara	
Tracking System	Tracking System Home	
Berita dan Kabar	Track Pengirinan Paket ID Pengirinan: Submit Reaut	
Profit Perushaan	What do you want to do?	
Tratang Kami	Ingen Pendriminan bara Undate posisi pendriman	
Hituna Kami	Log Off	
8		Ucesi intranet

Figure 5.6 Employees' page of features

Both administrator and employees can update the shipping position, however, administrator can update the position in wherever the place such in figure 5.7

tie Odt jien Pavortee	cking System: - Microsoft Texts Hein	Internet Explarer		_ 14 _
		Troits 🙆 🖨	- 😓 🖩 - 🔜 🎠 🕫 🕮	
http://lecahoer/va				🛩 💽 Ga 👘 Linius 🤇
	Pongangkutan Na	arional		
<u> </u>	P.N. Ma	arga Ja	aya	
	JI. Cemara no. 1AA Tel	p. (061) 611007 -	610107 - 613107 Fax 619741 Medan	
			K Mell Blok A No. 1 Telp. (021) 6621023 - 6621024 -	
	6832038 Fax. 661371	Lb Jakarta Utara		
		Update Posisi Po	engiritaan	
Fracking System	Silahica			
	ID	Sebelan		
Berita dan Kabar	123456789 123	BDG	apchite	
	070	LPO JKT	medate applicate	
	787	JKT	Incluse	
rofi Perushaan				
Tentang Kami				
Jubunai Kami				
Dave				Local intranet

Figure 5.7 Administrator's position update Screen

While the users (employees) that are in the shipping point can update the shipment position in such figure 5.8

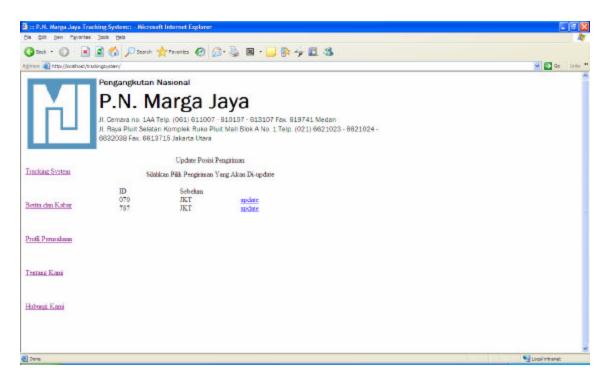


Figure 5.8 User's Position Update Screen

However, if there are no shipment in the place then there will be "Tidak ada pengiriman baru yang melewati tujuan ini" message as in figure 5.9

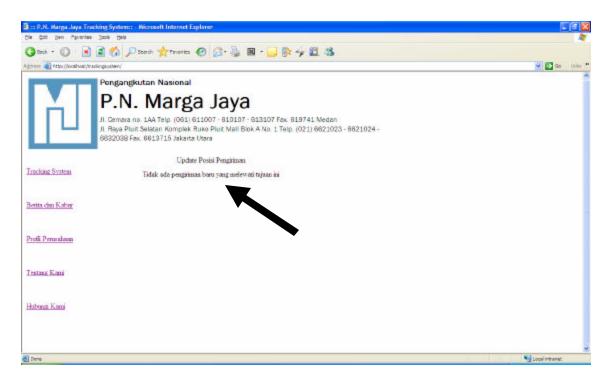


Figure 5.9 User's Position Update Screen when no shipment

Employees can input a new shipment to the system. Once inputted, then we already know where the shipment is originated by the login log. Example, If a Jakarta employee were to input shipment, then the origin will be from Jakarta, and there is no way to change that, as we can observe in figure 5.10

😳 : P.N. Harga Jasa Trackia	g System: - Nozila Fireles		
Ein But Dies Bo Book	ionadia Ioola Hala		9
4 - 4 - 🔗 🔞	🕤 🕥 http://local.host.te	atingtystm	.
🔄 Teaching Bystmi 🛄 262	PMyAdmin		
💮 n P.N. Marga Jaya Track	ding Systems 💽 localheat /	localhert [phpMyAdmin26]	
	JI. Cemara no. 1AA Telp.	rga Jaya (051) 611007 - 610107 - 612107 Fax, 619741 Medan mplak Ruko Pluit Mall Blok A No. 1 Telp. (021) 6621022 - 6821024 -	
Tracking System	Inp	ut Data Pengiriman	
Bartla dan Kakar	Koda Banginiman Nama Pengirim		
Profil Personalismen	Alamat Pengirim		
Tentang Karei	Telepon Pengirim		
Hubungi Karel	Name Partennia		
	Marriel Danastrea		
	Telepon Penenma		
	Kota Tujuan	Jokata	
	Transk Setelah Ini	Jakata 🔹	
	Lai Kirman Barak Ekiman		
	amax peoprom		
	Tanggal Sampai	00 00 000 000	
Date			-
Start ChPragram	Res Ver. 8 :: P.N. Marga	Jaya 😪 Macromedia Greanw 😤 Shapter 4.0.000 - Mic શ Shapter 5.0.000 - Mic	2 🐺 - 🛢 🖄 🛒 🖯 - alas PM

Figure 5.10. Input Shipment Screen

Administrator can also add more shipping points with "Tambah destination"

menu, and will be directed to figure 5.11

le çdit jien figvortes	king System:: - Microsoft Internet Explore Jook: Beb		
3md - (3) - (4)	3 🐔 Dearch 🔶 Provides 🙆	🙆 · 🎍 🖩 · 🔜 🖗 🌾 🛍 🍇	
intere al http://koahoe./vad			💌 💽 Ga 🛛 Leit
	Pengangkutan Nasional		
	P.N. Marga	212	
	F.N. Marga	Jaya	
	JI. Cemara no. 1AA Telp. (061) 61100	7 - 610107 - 613107 Fax. 619741 Medan	
	JL Raya Pluit Selatan Komplek Ruko	Pluit Mall Blok A No. 1 Telp. (021) 6621023 - 6621024 -	
	6632038 Fax. 6613715 Jakarta Utar		
1			
	Input Master	Kota Tujuan	
racicing System	Kode Koto Tujuan		
Constant and the second			
	Nama Kota Tujuan		
11 A 17 A			
erita dan Kabar	Submit	Reset	
		g Sudah Terdaftar	
rofil Perurahaan	Kode Kota Tujum	Nama Kota Tujuan	
	JKT	Jakarta	
	BGR	Bopor	
ratang Kami	SMG	Semanag	
and a second	BDO	Bandung	
	DJB	Janshi	
	MDN	Medan	
ubuna Kam	PLO	Palembang	
	LPG	Lampung	
	PKU	Pekanbaru	
	PDO	Padang	

Figure 5.11 Admin's add destination screen

Administrator can also request a report of the shipping and print it out as in figure 5.12.

	🟫 🛈 http://	localhost to	ackingsyster	8					- 🖸
dung System 🔄 PEPS	My-Admin								
N. Marga Jaya Trackia	ng Systems 0	locathoot	locations i ph	pNyAb	m26.				
'nТ			rga (061) 611 mplek Ruk	007-6 o Pluit	10107 - 6			819741 Medan . (021) 6621023 - 9821024 -	
Tracking Septem	On going Shipment List								
nota dan Kakar	Stomers		Destration	Sender	Stipment	Sast	STA.	Taropal	
	008	MOH	THE		21 Asp 2007	MEN	12	13-00-2367	
ofil Ferulatuan	01234867	731.08	D18	hing	28 Isl	307	14	17-08-2307	
	070	MON	3KT	kong Sht	2807 55 Jul 2807	3KT	-13728	986-09-88	
Tentang Karel	120		MON	0146	25 167	LPO	-13720	0380-00-80	
Rubungi Karni	84.8	800	E18		81 Jul 2007	803	3105	3307-08-30	
	666	THE	204		81 Aug 2007	3KT	8	12-09-2107	
	767	MOH	жт		11 167	жт	-13720	0380-00-80	
			4	laik to h					

Figure 5.12 Ongoing shipment List

At almost final stage of the documentation, the website components beside the tracking system: "Berita dan Kabar", "Profil Perusahaan", "Tentang Kami", and "Hubungi Kami", as figured in figure 5.13, 5.14, 5.15, and 5.16.

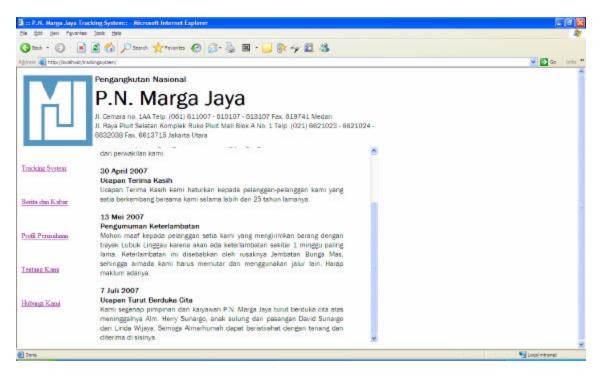


Figure 5.13 Berita dan Kabar

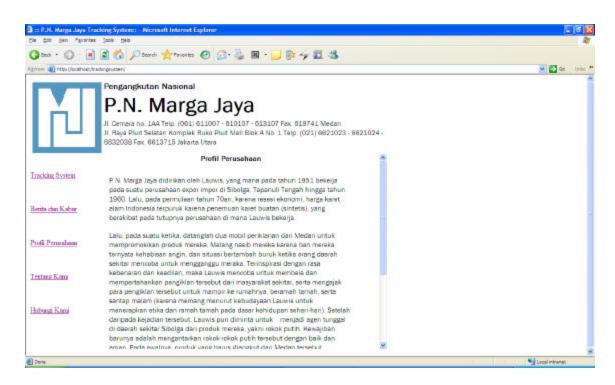


Figure 5.14 Profil Perusahaan

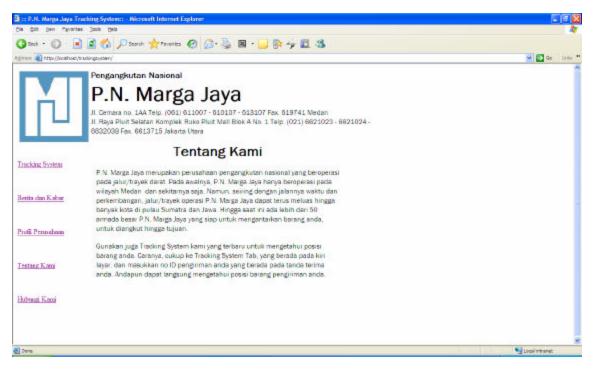


Figure 5.15 Tentang Kami

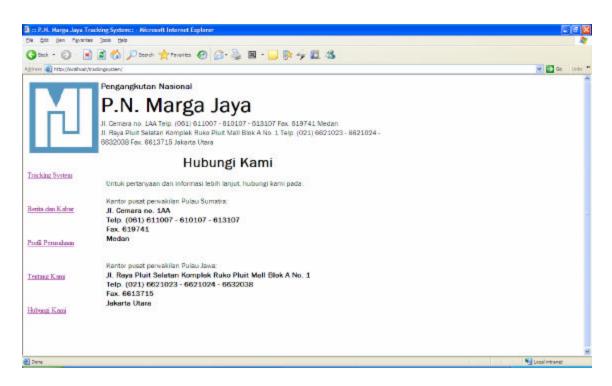


Figure 5.16 Hubungi Kami