Submission by "Facebook Ireland Ltd" to the Office of the Irish Data Protection Commissioner

Response to Complaint(s) Number: 4

The following submission by "Facebook Ireland Ltd" is a response to complaints filed by "europe-v-facebook.org" before the Irish Data Protection Commissioner as amended by our "request for a formal decision". It was received by "europe-v-facebook.org" on September 30th 2013.

The submission starting on page 2 of this PDC does only reflect the view of "Facebook Ireland Ltd" and was not changed or amended. The submissions were likely drafted by Facebook Ireland's law firm "Mason, Hayes & Curran". We did not receive any addition documents from "Facebook Ireland Ltd". All other documents of this procedure can be downloaded on "europe-v-facebook.org".

After we took a first look at the submissions by "Facebook Ireland Ltd" we want to mention the following points, to ensure that any reader will get the full picture of the procedure:

- 1. In the submissions Facebook Ireland Ltd does in many cases **not responded to our complaints**, but produced arguments and submissions that are irrelevant to the complaints filed. It seems that Facebook Ireland Ltd is trying to "bypass" the arguments we entertained.
- 2. In the submissions Facebook Ireland Ltd does in many cases **summarize our complaints** in a way that does not reflect the content of our complaints. We do not know why Facebook Ireland Ltd has chosen this approach other then again "bypassing" the core of the complaints.
- **3.** In the submission Facebook Ireland Ltd does not respond to the **legal arguments** that were submitted by us, but only focus on facts. The law is not cited in any of the submissions.
- **4.** In the past 2 years Facebook Ireland Ltd has changed many functions. In the submissions Facebook Ireland Ltd does in many cases **mix the factual situation** throughout this time period. Our complains are usually separating facts and consequences before and after such changes.
- 5. In the submission Facebook Ireland Ltd does in many cases refer to the "audit reports". The basis for these reports is not public or independently verifiable. In many cases the DPC has only relied on unverified arguments by Facebook Ireland Ltd when making its assessment. Facebook Ireland Ltd is now relying on these findings, as if they were independently verifiable facts.
- → Therefore we recommend to consult our original complains, as amended by the "request for a formal decision" [DOWNLOAD] when analyzing the submissions from "Facebook Ireland Ltd".

COMPLAINT 4 - SYNCHRONISING

1 BACKGROUND

1.1 What is Synchronising?

The Facebook App, which is available for mobile devices, allows users to upload contact information (names, phone numbers and email addresses) stored on their device to Facebook. This allows Facebook users to back up material that would otherwise be lost if the device were lost or stolen. When contact details are uploaded to Facebook, users can synchronise the contacts in their address book with their Facebook friends. Users can then: (1) send friend requests to the owners of the email addresses they have uploaded that are already Facebook users or (2) invite uploaded email addresses that are not associated with Facebook accounts to join Facebook. Synchronising a device with Facebook is an entirely optional feature and only occurs if a user actively chooses to import his or her contact information.

1.2 Data Use Policy

FB-I provides users with transparent and comprehensive information about synchronising, including details on how data obtained from synchronising is used. The following explanation appears in the Data Use Policy in the section entitled "Access on your phones and other devices":

Once you share information with your friends and others, they may be able to sync it with or access it via their mobile phones and other devices. For example, if you share a photo on Facebook, someone viewing that photo could save it using Facebook tools or by other methods offered by their device or browser. Similarly, if you share your contact information with someone or invite someone to an event, they may be able to use Facebook or third party applications or devices to sync that information. Or, if one of your friends has a Facebook application on one of their devices, your information (such as the things you post or photos you share) may be stored on or accessed by their device.

The Data Use Policy also contains the following explanation of Friend Finder, Invitations and the Contact Importer tool:

Friend Finder

We offer tools to help you upload your friends' contact information so that you and others can find friends on Facebook, and invite friends who do not use Facebook to join, and so we can offer you and others better experiences on Facebook through suggestions and other customized experiences. If you do not want us to store this information, visit this help page at:

https://www.facebook.com/contact_importer/remove_uploads.php.

Invitations

When you invite a friend to join Facebook, we send a message on your behalf using your name, and we may also include names and pictures of other people your friend might know on Facebook. We'll also send a few reminders to those you invite, but the invitation will also give your friend the opportunity to opt out of receiving other invitations to join Facebook.

The Data Use Policy further informs users that FB-I may receive information about them when other Facebook users import contacts. It states that:

Information others share about you

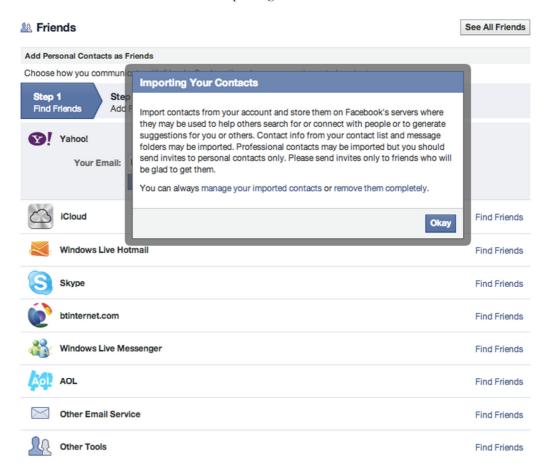
We receive information about you from your friends and others, such as when they upload your contact information, post a photo of you, tag you in a photo or status update, or at a location, or add you to a group.

When people use Facebook, they may store and share information about you and others that they have, such as when they upload and manage their invites and contacts.

1.3 Contact Importer

In addition to the information contained in the Data Use Policy, FB-I also informs its users of the features of contact importing when the contact importing process is initiated by a user. FB-I does this to ensure that users are provided with the information they require to make an informed decision about their contact information, where and when they need it.

The screenshot below illustrates the contact-importing flow on the Facebook website:



Facebook also provides an address book feature that allows users to see and control (including delete) their imported contacts:



1.4 Emails to Non-Users

After importing his/her contacts to the Facebook platform, a user may send invitations to his or her contacts to connect with him/her on Facebook. All such emails to non-users disclose the following information:

- a) That FB-I has his/her email address;
- b) That FB-I will use his/her email address in the future to help that person find friends on Facebook; and
- c) That he/she can direct FB-I to not contact them again by following the conspicuous "unsubscribe" link provided in the email.

If a non-user instructs FB-I to not send further invitation emails, FB-I will keep a hashed, non-usable version of their email address in order to prevent further messages from being sent to that individual. This way, if another user imports that non-user's email address and tries to send the non-user an email invitation, the invitation will be blocked from being sent.

The 2011 Technical Audit Report concludes at Section 2.4 that it is "effectively impossible to calculate the email address given the hash value."

1.5 Review by other Data Protection Authorities

FB-I's practices in relation to contact-importing were modified after consultation with the Hamburg Data Protection Authority and the Canadian Office of the Privacy Commissioner.

2 FACTUAL ASSERTIONS MADE BY COMPLAINANT

The Complainant objects to the manner in which the synchronisation service offered by FB-I operates. The following factual assertions, which are repeated in the Request for Formal Decision, are relied on by the Complainant:

- a) Synchronising involves the uploading of the totality of a user's personal data from a device to the Facebook platform.
- b) Once uploaded, FB-I then checks whether it can find users by matching names, emails and other information uploaded. FB-I uses this information for its own purposes such as promoting Facebook and sending invitation emails on behalf of the uploading user.
- c) The data subjects (i.e. the owners of e-mail addresses, for example) are not consulted on this use of data and have no means of preventing their personal data from being uploaded to the Facebook platform. The data subjects are not informed that FB-I is processing their data in this manner.
- d) The synchronising process makes it impossible to prevent a user's work email, for example, being uploaded by another user.
- e) Although before synchronising a device with the Facebook platform, users are asked whether all the data subjects are "comfortable" with their data being used they are not asked whether those data subjects have actually consented to the use of their data.

The Complainant further alleges that he has discovered means by which FB-I is illegitimately processing data uploaded to Facebook by other users. In particular, the Complainant makes the following new assertions in the Request for Formal Decision:

f) FB-I still allows users to import up to 5,000 email addresses to invite people to a new page on the Facebook platform. It is not possible that FB-I has valid consent for the processing of those users' data.

g) FB-I is using email information of its users obtained via synchronisation to link data obtained from "data brokers."

FB-I disputes certain of the factual assertions relied on by the Complainant and entirely rejects the legal conclusions which the Complainant seeks to draw from his factual assertions.

3 AUDIT PROCESS

3.1 Synchronising and Friend Finder

3.1.1 2011 Technical Audit Report

During the 2011 audit process, the DPC's independent expert conducted an in-depth analysis of synchronizing. The results of this assessment are set out in the 2011 Technical Audit Report. The relevant provisions are set out below:

3. Synchronising¹

3.1 Background

Facebook provide a mobile platform for allowing users to interact with Facebook on their mobile devices. Applications are available for iPhone, Palm, Sony Ericsson, INQ, Blackberry, Nokia, Android, Windows Phone and Sidekick.²

Testing has been performed on the iPhone version of the Facebook app (version 4.0.2). Only the contact synchronisation feature of the mobile application is under consideration as part of the present review.

The contact syncing functionality of the mobile application allows users of the application to synchronise the contacts in their address book with their Facebook friends.

3.2 Transmission of Contact Information

The information transmitted by the application while contact synchronisation is taking place has been captured and examined using the following process:

- A newly installed, fully patched Windows XP virtual machine with anti-virus software installed is used to create a new Facebook account. All browsing was carried out using the default configuration of Internet Explorer 8 (Version: 8.0.6001.18702).
- Two test contacts are transferred to the address book on an iPhone 3GS (iOS version 5.0.1). These contacts contained the following fields:
 - 0 Name
 - 0 Email
 - Phone
 - Address
 - Company name
 - Friend
 - 0 Assistant
 - o AIM
- Wireshark³ is used to capture all traffic generated by the iPhone on the appropriate wireless network.
- The Facebook app is started and logged in to the new Facebook account.
- Contact syncing is enabled and the synchronisation is observed to take place.

The traffic generated in this way has been examined and the aspect of communication between the iPhone app and Facebook relating to the transmission of the contact information has been isolated. It was noted that the following data structure was transmitted to Facebook⁴

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¹ Pages 157 to 161 of the 2011 Technical Audit Report

² http://www.facebook.com/mobile/

³ http://www.wireshark.org/

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[

"phones":["<Contact 1 Phone>"],

"name":"<Contact 1 Name>",

"emails":["<Contact 1 Email>"]

},

{

"phones":["<Contact 2 Phone>"],

"name":"<Contact 2 Name>",

"emails":["<Contact 2 Email>"]

}
```

It is therefore confirmed that only the contact name, email(s) and phone number(s) are transmitted to Facebook. None of the other contact information appears to be transferred.

It is not possible for the user to select a subset of contacts to synchronise with Facebook. The names, phone numbers and email addresses of all contacts in the phone's address book will be transferred.

3.3 Security of Transmitted Data

Facebook provides a range of optional security settings. One of which is known as secure browsing which will use a secure connection (https) to browse Facebook when possible.⁵ This feature is not currently available for mobile browsing.

It has been confirmed that the contact information being synchronised is transmitted in plain text regardless of the state of the secure browsing setting.

3.4 Contact Synchronisation vs. Find Friends

The Facebook iPhone application has two closely related features, contact synchronisation and find friends. Both of these features are accessible by pressing the same button, in the top right hand corner of the "Friends" screen in the iPhone app.

Important distinctions in the behaviour of these features have been identified and are explained here. The following test was performed to illustrate the difference between the treatment of data using "Sync Contacts" and "Find Friends":

- A newly installed, fully patched Windows XP virtual machine with anti-virus software installed is used
 to create a new Facebook account. All browsing was carried out using the default configuration of
 Internet Explorer 8 (Version: 8.0.6001.18702).
- The Facebook iPhone app is installed on an iPhone
- The Facebook iPhone app is started and the new Facebook account is used to log in.
- The contact synchronisation feature is enabled.
- It was confirmed by logging in to Facebook that the contact information is not visible under "Manage Invites and Imported Contacts"
- "Find Friends" is clicked in the Facebook iPhone app.
- It was noted that the contact information is now visible under "Manage Invites and Imported Contacts"

It is notable that after contact synchronisation was enabled the contact information was not accessible from the user's "Manage Invites and Imported Contacts" page. The only way that was identified for interacting with

⁴ The actual contact information has been removed in the excerpt provided. Names have been replaced with "<Contact 1 Name>, <Contact 2 Name>", emails with "<Contact 1 Email>, <Contact 2 Email>" and phone numbers with "<Contact 1 Phone>, <Contact 2 Phone>"

 $^{^5\} http://www.facebook.com/help/?page=132501803490562$

⁶ http://www.facebook.com/invite_history.php

synchronised contact information was via the Facebook iPhone app. It is important to emphasise that the "Find Friends" button in the iPhone app had not been pressed at this point.

Syncing can be disabled at any time through the iPhone app. The action of disabling synchronisation does not appear to delete any of the synchronised data.

There is a "Remove Data" button on the contact synchronisation screen in the iPhone app. There are two categories of data created by the synchronisation process that one would expect to be deleted;

- Data that was transferred from Facebook to the iPhone
- Data that was transferred from the iPhone to Facebook

The data that was transferred from Facebook to the iPhone constitutes the additional data that is added to the user's address book, namely profile photos, birthdays and Facebook URLs. It has been confirmed that changes made to contacts by the contact synchronisation process are removed by clicking the Remove Data button.

The data that was transferred from the iPhone to Facebook, specifically the names, phone numbers and email addresses of all contacts in the phone address book, are not deleted from the Facebook servers when the "Remove Data" button is pressed.

It is possible to delete the synchronised contact information from Facebook's servers, but it is not immediately apparent how to perform this task. Despite the fact that the synchronised contact information is not visible in the "Manage Invites and Imported Contacts" page, the "remove all your imported contacts" link will remove the synchronised contact data from Facebook's servers.

This has been verified as follows:

Create a new test Facebook account and verify that no contacts are present in the "Manage Invites and Imported Contacts" link.

- Using Facebook's internal tools, verify that no contact information is present in the user's phone book.
- Install the Facebook iPhone app.
- Enable contact synchronisation in the iPhone app.
- Verify that contacts are not visible in the "Manage Invites and Imported Contacts" link.
- Using Facebook's internal tools, verify that the contact information synchronised from the iPhone is present in the user's phone book.
- Turn off contact synchronisation in the iPhone app.
- Via "Manage Invites and Imported Contacts", use the "remove all your imported contacts" link to remove all imported contact information.
- Confirmed using Facebook's internal tools that the contact information synchronised from the iPhone is no longer present in the user's phone book.

It is not possible for a user without access to Facebook's internal tools to verify that the synchronised contact information has been deleted. The fact that it is not apparent to the user how to manage their synchronised contact information is a shortcoming in the Facebook user interface.

As described below, the functionality of the "Find Friends" button appears equivalent to contact importation as described in Section 2. The fact that the synchronised contact data is not visible to the user without first performing a contact import (i.e. clicking "Find Friends") will tend to blur the distinction between these two features both in reality and in terms of user expectations.

When the Find Friends button is clicked, the user's address book information is presented in two categories in the iPhone app interface; firstly, any contacts that are existing Facebook users are displayed and the user can choose to send friend requests, and secondly, non-Facebook users are displayed and the user can choose to send

invites to these contacts to join Facebook and become friends. Both sets of users are presented with an option to simultaneously send connection requests to all contacts being presented.

Only after the "Find Friends" button has been clicked is the contact information visible in the "Manage Invites and Imported Contacts" Facebook page. The Facebook user appears to be able to perform the same functions on the contacts that were available when contact importation was used to import the contacts. This functionality is described in Section 2.

The contact information can be removed via the "remove all your imported contacts" link on the "Manage Invites and Imported Contacts" page. This is exactly the same process that is followed when contacts are imported from any source with the proviso that removed contacts will be reimported automatically unless you turn off syncing in the Facebook iPhone app.

Testing has been performed to confirm that after the contacts have been removed via the "remove all your imported contacts" page that they appear to be re-imported automatically from the iPhone app only after the "Find Friends" button is clicked.

As described in Section 2.2, a code review has been performed on the contact removal code to verify that the code actually deletes the imported contact information as expected.

3.5 Use of Non-Facebook Synchronised Contacts, Imported Contacts and Invites in "People You May Know" Calculations

A series of tests have been performed to attempt to understand how synchronised contacts, imported contacts and sent invitations relate to the generation of "People You May Know" suggestions.

If a Facebook user enables the contact synchronisation feature of the Facebook iPhone app, then if there are any existing Facebook users in the synchronised contacts, these will be suggested as people you may know. The existing Facebook users are presented both as a separate list under "Find Friends" in the iPhone app and also may be presented in the "People You May Know" section of the Facebook web page.

The following scenario was considered:

- Two Facebook users that have no friends in common
- Both users install the Facebook iPhone app and enable contact synchronisation
- The two users have a non-Facebook user contact in common

The fact that the two Facebook users have a non-Facebook user contact in common does not appear to change the "People You May Know" suggestions for either user. In particular, the two users who have the non-Facebook user contact in common are not suggested to each other as "People You May Know". This appears to also be true if both of the users have sent invitations to the non-Facebook user (which the non-Facebook user has ignored).

Detailed technical documentation for the "People You May Know" functionality has been provided by Facebook and reviewed as part of this process. Non-user data is never reported as being used to generate "People You May Know" suggestions. The results of the testing described in this section are consistent with the documented functionality.

3.1.2 2011 Audit Report

In the 2011 Audit Report, the DPC characterised the Complainant's objections to synchronisation in the following terms:

Facebook offers a facility to allow users to synchronise their mobile phones or other devices with Facebook, thus allowing users to find people they know on Facebook. The complainant was of the view that the synchronising process involves all personal data on the device being transferred to Facebook and that if, for example, an individual does not want his work email address or telephone number to be known to Facebook, he has no option to prevent Facebook from collecting this personal data through the upload of information by a Facebook user.

The complainant stated that the user or data subject has not provided their consent for their personal data to be collected by Facebook. In addition, the complainant considered that Facebook is in breach of data protection legislation as it is processing the collected data in order to match users, send invitations and advertise Facebook services.⁷

In the 2011 Audit Report, the DPC also noted FB-I's position on this issue:

Facebook described synchronisation as an optional service that allows users to back up their mobile contact details. Users may subsequently choose to issue friend requests to uploaded contacts.

Facebook clarified that it does not process all personal data on the device. The only data which can be synchronised are names, phone numbers and email addresses.

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In relation to non-users having the opportunity to opt out, Facebook indicated that they offer a link to allow the non-user to delete their email details. Facebook contends that it has the implied consent of the non-user to process their information if the user decides not to instruct Facebook to remove their data. Facebook further noted that it will not contact a non-user unless it is instructed by the user who uploaded the contact information.⁸

At page 121 of the 2011 Audit Report, the DPC indicated that it was in agreement with the findings which the Office of the Privacy Commissioner of Canada ("OPC") intended to make in a separate investigation in this area. Therefore, the DPC did not propose to substantively address any concerns raised with respect to synchronising contact information, the friend finder feature or the sending of Facebook invitations to non-users.

The DPC did, however, examine modifications which had already been made to the Facebook platform in light of the findings of the OPC and concluded that these changes would enhance the control of a non-user over the use of his/her information by FB-I. The 2011 Audit Report found as follows:

Our office concurs with the findings which the OPC intends to make in this area and therefore has not reexamined them in the context of this audit. FB-I has already implemented the same changes to these features as Facebook Inc. did during the OPC's investigation. These changes should serve to improve the ability of a nonuser to clearly understand the use of their email addresses by FB-I and request the cessation of this processing.⁹

In relation to the uploading of users' contacts generally, the 2011 Audit Report found that if certain safeguards and opt-outs remained available to non-users of Facebook, then the uploading of their contact information and the sending of invitations to join Facebook could operate in accordance with data protection law. The 2011 Audit Report stated as follows:

Based upon the previous analysis by the Canadian and Hamburg data protection and privacy authorities, this Office was satisfied that the upload of contacts by individuals to facilitate the sending of invitations to friends could operate in compliance with the Data Protection Acts provided full information was provided to non-users in relation to the use of their email address data on receipt of an invitation and any requests for removal are respected. We have confirmed that the email addresses of non-users who have opted-out from further contact are held in an appropriate hashed form and are not available for any further use.¹⁰

In conclusion, the DPC made no specific recommendations on this issue but simply noted that:

8 Page 120 of the 2011 Audit Report

⁷ Page 120 of the 2011 Audit Report

⁹ Page 121 of the 2011 Audit Report

¹⁰ Page 121 of the 2011 Audit Report

We are satisfied that, aside from storage of synchronised data for its users, FB-I makes no additional use of telephone numbers or other contact details uploaded as part of the synchronisation feature unless the user chooses to supply email addresses for friend finder purposes.¹¹

For the sake of completeness, it should also be noted that the DPC made two technical best practice recommendations in connection to the *implementation* of contact importer. First, the DPC suggested that FB-I should take steps to ensure that users are aware that contacts transmitted from a mobile device are sent in plain text.¹² Second, while accepting that this was "not explicitly a data protection issue"¹³ the DPC suggested that it should be made "clear to user that disabling syncing is not sufficient to remove any previously synced data".¹⁴

3.1.3 Modifications introduced by FB-I following OPC investigation

As a result of the 2011 Audit Report, and the findings made by the OPC in PIPEDA Report of Findings #2012-002, FB-I made a number of modifications to its platform with a view to improving aspects of its contact-importer flow and the non-user invitation process. These enhancements included more prominent disclosures to non-users who receive email invitations, and further disclosures to users in the contact-importing and invitation-sending processes.

As part of the improvement in the functionality of its platform, FB-I also agreed to refrain from using non-user email addresses for "People You May Know" or friend-finding until that non-user received an email invitation from a Facebook user and had the opportunity to opt-out of this use of his / her email address.

3.1.4 2012 Technical Audit Report

This issue was again considered in depth in the 2012 Technical Audit Report, the relevant provisions of which are set out below for reference:

1.1 Contact Importing¹⁵

When a user creates a Facebook account, they have the opportunity to import contacts from a range of e-mail service providers to Facebook. It is possible that the user's contacts will include both users and non-users of Facebook. As well as sending friend requests to existing Facebook users, the user performing the contact import has the opportunity to invite the non-users to join Facebook and become friends.

If the user sends an invitation to a non-user, this will cause the non-user to receive an e-mail from Facebook containing a link that will allow the non-user to create a Facebook account.

The non-user can ignore this e-mail if they do not want to join Facebook. A link is provided in the invitation e-mail that allows the non-user to choose to opt out of receiving subsequent invitation requests from Facebook.

It is possible that a second Facebook user could import the same non-user e-mail address. Assuming that the non-user does not choose to opt out of receiving invitations, a second invitation could be sent to the non-user by the second Facebook user. The second (and subsequent) invitations may include reference to other Facebook users that the non-user may know.

1.1.1 Storage and Removal of Contact Data

As part of the previous audit, a review was performed of the data structures within which imported contact information is stored. These data structures were re-examined as part of this audit.

While the structures themselves have not changed in the period since the initial audit, an increased understanding

¹² Page 125 of the 2011 Audit Report

 $^{^{\}rm 11}$ Page 125 of the 2011 Audit Report

¹³ Page 122 of the 2011 Audit Report

¹⁴ Page 126 of the 2011 Audit Report

¹⁵ Pages 4 to 10 of the 2012 Technical Audit Report

of the structures gained in this audit has enabled greater clarity of how imported contacts are stored.

The imported contact information appears to be stored in the following way(s):

- Each time a user performs an import, the imported data is added to an array of imports, one entry for each set of imported data. Each entry in this array consists of a data structure containing an array of the contact names and a corresponding array of the contact e-mail addresses. This information is associated with the importing user's Facebook account.
- A data structure consisting of a hash of the e-mail address of the imported contact and the string
 consisting of a comma separated list of Facebook user IDs for users that have imported that particular email address.
- A data structure containing a list of non-users to which the user has sent invitations.

In the initial technical report, it was stated that two other data structures referred to as "the user's address book" and "the user's phone book" were also populated with non-user contact information. Upon re-review it has been confirmed that in fact the address book and phone book are both generated from the array of imported data mentioned above.

Once again, no other storage of contact information about non-Facebook users has been identified.

The source code invoked when the user requests deletion of all imported contact data¹⁶ has been re-reviewed. It has been confirmed that the following steps are carried out:

- All data is removed from the array of imports.
- The Facebook user ID of the user requesting the removal of the imported data is removed from the comma separated list of user IDs associated with all of their contact email addresses. If there are no remaining user IDs associated with a particular contact email address, the contact e-mail address entry is also removed. This continues to imply, as mentioned in the first report, that if a single Facebook user imports a particular contact e-mail address and that user subsequently removes their imported contacts, then all reference to the imported contact will be removed from this structure.
- The fact that the user has sent invitations to particular non-users is not deleted if the user requests deletion of all imported contact data because these are valid outstanding friend requests. It is, however, possible for the user to select and remove invites using the invite history page¹⁷.

1.1.2 Use of Contact Data

As described in the first report, and verified in the second audit, there are only a small number of tasks that a user can perform with the imported contact information. In particular:

- The user can send invitations to the important contacts to become friends
- The user can remove the imported data

As part of the first audit, how the imported contact data is used by FB-I to make "People You May Know" suggestions was considered. At that time, detailed technical documentation for the "People You May Know" functionality was provided by FB-I and reviewed. FB-I have confirmed that the use of the imported contact data to generate "People You May Know" suggestions has not changed since that time.

For completeness, the findings of the initial report in relation to the use of imported contact data to generate people you may know suggestions are included again here. Recall, the imported contact data may consist of both existing Facebook users and non-users. Considering these cases separately:

It was noted in the case of existing Facebook users in the imported contact data:

¹⁶ Invoked when the user selects "remove all your imported contacts" from the "Manage Invites and Imported Contacts" page.

¹⁷ http://www.facebook.com/invite_history.php

- O That the existing Facebook users may be used as the basis of "People You May Know" suggestions
- Other Facebook users who have imported the existing Facebook user as a contact may also, in some circumstances, be used as the basis of "People You May Know" suggestions.
- It was noted in the case of non-Facebook users in the imported contact data:
 - That two Facebook users that have only a non-Facebook user imported contact in common does not appear to cause the two users to be suggested to each other as "People You May Know". This is consistent with the documentation provided by FB-I detailing the operation of the "People You May Know" functionality.
 - If multiple Facebook users have imported the same non-user e-mail address, invitations sent to the non-user may contain suggestions of other users that have also imported the non-user's e-mail address. Users who have already sent invitations to the non-user do not appear to be suggested in subsequent invitations.

Based on both the first and second audits, the evidence would seem to indicate that the functionality by which Facebook users are suggested to each other as possible friends (referred to above as "People You May Know") and the functionality by which users are suggested to nonusers in invitations operate on separate principles. FB-I have also re-confirmed that these two pieces of functionality are separate.

1.1.3 Non-user Opt Out

When a non-Facebook user chooses to opt out of receiving subsequent invitations from Facebook, a hash of their e-mail address is created and stored. A hash is a one-way function that generates a unique value representing a particular e-mail address¹⁸.

Scenarios can arise where Facebook user activity could cause the non-user to receive e-mail invitations. An example would be if a second user attempts to invite the non-user to join Facebook. The fact that the non-user's e-mail address matches a hash in the list of opted out email hash values will prevent the e-mail from being sent.

In the first report, FB-I provided a list of all the possible ways that a non-user of Facebook could receive an e-mail from Facebook. The list provided at the time was:

- A user invites a non-user to join Facebook
- A user sends a private message to a non-user
- A user creates an event and invites a non-user to the event

At the time of writing of this report, it is no longer possible for a user to invite a non-user to an event.

Therefore, the impact of the user having opted out is that they will not receive any more invitations to join Facebook. This functionality has been retested and confirmed to work as described.

An opted out non-user will still receive private messages sent by users of Facebook from within Facebook similar to the way that any email service operates.

1.1.4 Import Password

When importing contacts from an e-mail account, the user can provide Facebook with the username and password of the supported e-mail provider. Facebook will then use these credentials to connect to the e-mail provider and import contacts.

The code used to perform this functionality has been re-examined and it has been confirmed, as it had been in the first audit, that the e-mail provider password is stored in memory for the duration of the import task and then

¹⁸ As mentioned in the initial report, there is a remote possibility of two email addresses having the same hash value. This is known as a hash collision. In the case of non-user opt out, a hash collision would lead to a scenario where a non-Facebook user who had not opted out of receiving emails would not receive emails from Facebook because the hash of their email address matches the hash of the email address of another non-Facebook user who has opted out of receiving emails. In particular, this would not lead to a situation where Facebook could recover non-user email addresses from stored hash values.

discarded.

1.2 Synchronising

Facebook provide a mobile platform for allowing users to interact with Facebook on their mobile devices¹⁹. In the previous report, testing was performed on the contact synchronisation feature of the mobile application. The contact synchronisation functionality of the mobile application allows users of the application to synchronise the contacts in their address book with their Facebook friends.

1.2.1 Transmission of Contact Information

As part of the original report the data transmitted by the iPhone Facebook application was captured while contact synchronisation was taking place. This information was examined and it was noted at the time of the original report that the user's contact data was transmitted in plain text.

As part of this review, this testing has been repeated on both the iPhone and Android Facebook applications. It has been confirmed that in both cases the data transmitted while contact synchronisation is taking place is now encrypted.

1.2.2 Contact Synchronisation vs. Find Friends

As discussed in the first report, the Facebook iPhone²⁰ and Android²¹ applications have two closely related features, contact synchronisation and find friends. The purpose of the contact synchronisation functionality is to provide Facebook users with a way to back up their contacts from their phone. The purpose of the find friends feature is to provide Facebook users with a way to search through the contacts on their phone for other Facebook users to become friends with and to invite non-Facebook users in their contacts to join Facebook.

The first report made several observations about these two features. These were:

- After contact synchronisation was enabled, the contact information is not accessible from the user's "Manage Invites and Imported Contacts" page.
- Contact synchronisation can be disabled at any time through the mobile application.
- The act of disabling contact synchronisation does not delete any of the synchronised data.
- There is a "Remove Data" button in the mobile applications that removes data transferred from Facebook to the mobile device. This information will have been added to the address book on the mobile device and can include profile photos, birthdays and Facebook URLs.
- To remove the data transferred to Facebook from the mobile device requires the user to visit "Manage Invites and Imported Contacts" on the Facebook website and click "remove all your imported contacts", even though the contact information is not visible in "Manage Invites and Imported Contacts".
- Using Facebook internal tools it was confirmed that when "remove all your imported contacts" is selected that all synchronised contact information has been deleted. This is the same process followed when contacts are imported from any source as described in Section 1.1 with the proviso that removed contacts will be reimported automatically unless you turn off contact synchronisation in the mobile application.
- When the find friends button is clicked, the user's address book information is presented in two categories; contacts that are existing Facebook users and non-Facebook users. The user can choose to send friend requests to existing Facebook users and invitations to non-Facebook users. Both sets of users are presented with an option to simultaneously send friend requests or invitations to all contacts being presented.
- Only after the find friends button has been clicked is the contact information visible in the "Manage Invites and Imported Contacts" Facebook page.

¹⁹ http://www.facebook.com/mobile/

²⁰ The testing in the original report was performed on version 4.0.2 of the Facebook iPhone app. The testing for this report was performed on version 4.1.1 of the Facebook iPhone app, which was the latest version of the app at the time that the testing was performed. In the time between the testing and the completion of the report, version 5 of the Facebook iPhone app has been released and announcements have been made of integration of Facebook functionality into iOS 6. Neither version 5 of the Facebook iPhone app nor Facebook integration into iOS 6 has been examined as part of this work.

²¹ The Android application was not reviewed as part of the first report.

The testing carried out as part of the first audit has been repeated and the findings described above continue to be an accurate reflection of the operation of the functionality at the time of testing. The imported contact deletion code was also re-reviewed to confirm this.

As mentioned in the footnote of Section 1.2.2, a new version of the iPhone application, version 5, has been released in the meantime. Testing has not been performed on this version, but FB-I report that the contact synchronisation feature has been removed from this version.

The repeat testing has identified the following additional point which must be clarified; If the user has chosen to send friend requests to Facebook users or invitations to any non-users from their imported contacts, the fact that these invitations have been sent is not deleted when the user clicks "remove all your imported contacts" because, as discussed in Section 1.1.1, these are valid outstanding friend requests.

1.2.3 Use of Non-Facebook Synchronised Contacts, Imported Contacts and Invites in "People You May Know" Calculations

In the first audit, a series of tests were performed to understand how synchronised contacts, imported contacts and sent invitations related to the generation of "People You May Know" suggestions. The results were as follows:

- Any existing Facebook users in synchronised contacts will be suggested as people you may know.
- The fact that two Facebook users have a non-Facebook user contact in common does not appear to change the "People You May Know" suggestions for either user. In particular, the two users who only have the non-Facebook user contact in common are not suggested to each other as "People You May Know". This appears to also be true if both of the Facebook users have sent invitations to the non-Facebook user (which the non-Facebook user has ignored).

The testing has been re-performed and the findings above have been found to continue to accurately reflect the behaviour of the site.

As part of the first audit FB-I provided detailed technical documentation for the "People You May Know" functionality. The documentation indicated that non-user data is not used to generate "People You May Know" suggestions. FB-I have confirmed as part of this audit that the use of contacts and invites in "People You May Know" has not substantially changed in the intervening period. The results of the testing described here, and in the first audit report, continue to be consistent with the documented functionality.

3.1.5 2012 Audit Report

At Paragraph 2.11 of the 2012 Audit Report, the DPC noted that it had been satisfied in the 2011 Audit Report that FB-I made no additional use of telephone numbers or other contact details uploaded as part of the synchronisation function, unless directed to do so by a user. The DPC further stated as follows in the 2012 Audit Report:

The technical analysis has indicated that FB-I has not altered its use of telephone numbers or other contact details uploaded as part of friend finder and synchronisation.²²

In the 2011 Audit Report, the DPC had expressed concern regarding the transmission of data from electronic devices to the Facebook platform which at that time was by way of plain text. The DPC noted at Section 2.11 of the 2012 Audit Report that FB-I had since addressed this issue by encrypting the information which passes between Facebook and iPhone and Android devices using Transport Layer Security.

²² Page 44 of the 2012 Audit Report

3.1.6 Synchronising and Friend Finder – Conclusion

The synchronising feature was closely considered by the DPC in the course of the audit process. As a result of audit process and the OPC investigation, FB-I made numerous modifications to the contact-importing feature which are detailed above in this Response.

3.2 Business Uploads of Contacts

3.2.1 2011 Audit Report

In the 2011 Audit Report, the DPC carefully examined FB-I's practice in respect of business users who avail of the facility offered by the Facebook platform to upload contact details of potential customers and to send emails to those contacts informing them of products and services being offered by that business.

In this respect, the DPC found that FB-I had sufficient safeguards in place to minimise the risk of abuse of this function by Facebook users. The DPC stated as follows:

FB-I noted that as a measure to prevent Page administrators from sending messages to individuals located in the EU, it has geoblocked the major EU domains so that messages from Pages cannot be sent to the vast majority of EU users or non-users. In this respect it is noted that Facebook takes the additional precaution of highlighting to any business uploading contact details that there is a requirement for consent. The Page administrator must affirmatively indicate by checking a box that they have consent from the recipient to send a marketing message... Facebook also provides a link to additional information for Page administrators to read to ensure their messages meet the requirements of the law.²³

The DPC further noted that on foot of its findings, FB-I had "immediately geoblocked the major EU domains so that messages from Pages cannot be sent to the vast majority of EU users or non-users. It will further improve the information and warnings made available to businesses using this facility." ²⁴

3.2.2 Update Report

In its Update Report of July 2012, FB-I highlighted that in order to prevent misuse of the business contact importer facility, it currently blocks a dynamic list of over 300 internet domains, which is significantly over-inclusive and greatly reduces the risk of Facebook users receiving emails from Page administrators without having consented to receipt of those emails.²⁵

FB-I's Update Report also reconfirmed that Page administrators' uploaded contacts are not used for friend-finding purposes.

3.2.3 2012 Audit Report

The findings of the 2012 Audit Report did not materially differ from the findings of the 2011 Audit Report. In concluding that FB-I had satisfactorily addressed the DPC's concerns in this area, the 2012 Audit Report stated as follows²⁶:

At Chapter 12 of its Update Report, FB-I has indicated that it "already provided numerous protections around its business contact importer product to minimise the risk that EU individuals would receive emails from Page administrators. These measures include: 1) blocking all major EU domains; 2) requiring administrators to check a box affirming that they have consent to send the emails; and 3) prominently displaying a message that alerts Page administrators to the requirement that they comply with all applicable laws including European Laws".²⁷

 $^{^{23}\,\}text{Page}$ 123 of the 2011 Audit Report

²⁴ Page 126 of the 2011 Audit Report

²⁵ Page 67 of the Update Report

²⁶ Page 45 of the 2012 Audit Report

 $^{^{\}rm 27}$ Page 45 of the 2012 Audit Report

The 2012 Audit Report therefore concluded that this issue had been "satisfactorily addressed by publication of December Audit and re-confirmed" 28.

3.2.4 Business Upload of Contacts – Conclusion

The DPC has closely considered FB-I's policy in respect of business uploads of contact details and the subsequent use of those details by businesses and has concluded that the safeguards employed by FB-I to prevent abuse of this mechanism are satisfactory. The Complainant has not adduced any additional facts or legal analysis in his Request for Formal Decision²⁹ which would justify a departure from that standpoint.

4 APPLICATION TO CURRENT COMPLAINT

In light of the position as set out above, FB-I would respond to each of the Complainant's factual assertions as follows:

a) Synchronising involves the uploading of the totality of a user's personal data from a device to the Facebook platform.

The only data which FB-I processes when a user chooses to synchronise a device with the Facebook platform are names, phone numbers and e-mail addresses. This is confirmed by Section 3.2 of the 2011 Technical Audit Report, which provides as follows:

It is therefore confirmed that only the contact name, email(s) and phone number(s) are transmitted to Facebook. None of the other contact information appears to be transferred.³⁰

b) Once uploaded, FB-I then checks whether it can find users by matching names, emails and other information uploaded. FB-I uses this information for its own purposes such as promoting Facebook and sending invitation emails on behalf of the uploading user.

Invitation emails are only sent on the direction of Facebook users and this use of information is clearly stated in the Data Use Policy. Moreover, the DPC has examined this aspect of the Facebook product and concluded³¹ that the sending of invitations to non-Facebook users is in compliance with the Data Protection Acts, if the non-user has the opportunity to opt-out of receiving invitations and if non-users' wishes to opt-out are respected by FB-I. There can be no suggestion that FB-I does not comply with those conditions.

c) The data subjects (i.e. the owners of e-mail addresses, for example) are not consulted on this use of data and have no means of preventing their personal data from being uploaded to the Facebook platform. The data subjects are not informed that FB-I is processing their data in this manner.

To the extent that the Complainant alleges that Facebook users themselves did not consent to their contact details being uploaded to Facebook by other users, this is unsustainable in light of the clear disclosures in the Data Use Policy which expressly informs users that FB-I receives their information when other users upload their contacts to Facebook. In terms of the Complainant's objection regarding non-Facebook users, the DPC found conclusively that the storage of non-user contact information and the sending of Facebook invitations to non-users at the instigation of a user involves no breach of the Data Protection Acts.

The Complainant's assertion is fundamentally undermined by the findings of the DPC in its audit process. The DPC found that the sending of invitations to non-Facebook users was not problematic as long as certain safeguards were in place. All emails to non-Facebook users clearly offer the option of opting-out of receiving such emails; and there is no doubt but that FB-I respects any non-user's choice to

²⁸ Page 46 of the 2012 Audit Report

²⁹ Page 55 of the Request for Formal Decision

³⁰ Page 158 of the 2011 Technical Audit Report

³¹ Page 121 of the 2011 Audit Report

opt-out.³² On this basis, the DPC expressed no misgivings in relation to the sending of invitations to non-users from a data protection perspective.

d) The synchronising process makes it impossible to prevent a user's work email, for example, being uploaded by another user.

FB-I, as the provider of an address book service, does not control or modify the contact details which users upload to their address books.

e) Although before synchronising a device with the Facebook platform, users are asked whether all the data subjects are "comfortable" with their data being used they are not asked whether those data subjects have actually consented to the use of their data.

Insofar as the Complainant contends that Facebook users have not consented to their data being used when another user synchronises a device with the Facebook platform, this is incorrect. The *Information others share about you*' section of the Data Use Policy plainly informs users that Facebook receives users' information when their friends or other Facebook users upload their contact information.

To the extent that the Complainant's objection relates to non-Facebook users, the findings of the DPC are conclusive in this regard: the storage of non-user contact information and the sending of Facebook invitations to non-users at the instigation of a user involves no breach of the Data Protection Acts.

f) FB-I still allows users to import up to 5,000 email addresses to invite people to a new page on the Facebook platform. It is not possible that FB-I has valid consent for the processing of those users' data.

The Update Report, the 2011 Audit Report, and the 2012 Audit Report detail FB-I's extensive efforts to reach a satisfactory position with regard to the use by Page administrators of the facility to upload contacts and to send emails on the Facebook platform: (a) the major EU domains have been geo-blocked to prevent the practice; (b) page administrators must expressly indicate that they have the recipients' consent before sending a marketing message; and (c) FB-I provides a link for all page administrators which explains to them the legal requirements which must be complied with before a message of this nature may be lawfully sent.

In the 2012 Audit Report, the DPC stated that this issue had been "satisfactorily addressed by publication of December Audit and re-confirmed".³³ There has been no material change in the manner in which the Facebook platform operates in relation to business use of Facebook for direct marketing and therefore no basis to disturb the findings of the DPC.

g) FB-I is using email information of its users obtained via synchronisation to link data obtained from "data brokers".

This assertion is untrue and baseless. As the DPC confirmed, FB-I does not use email addresses uploaded via contact importer for advertising purposes.

³² Page 121 of the 2011 Audit Report

 $^{^{\}rm 33}$ Page 10 of the 2012 Audit Report