

	BP Data Checker	
	User's guide	
Title: User's guide		Version: 2018-05-04 (1.0/00X)

1. Product description and requirements	2
1.1. Technical requirements	2
1.2. Package content	2
2. Transactions and programs	3
2.1. BP Data Checker - main transaction	3
2.2. BP Data Checker - main transaction – selection screen	3
2.3 BP Data Checker – main transaction – reporting screen	9
BP Data Checker – BP checking and BP creation	11
3. Usage of BP Data Checker's API	13
4. BP Data Checker – user extensions	15
5. BP Data Checker configuration	16
6. Additional information	16

1. Product description and requirements

BP Data Checker extends standard SAP system functionality by allowing checking directly from SAP names and address data of business partners. The data is checked against REGON/ VIES databases. BP Data Checker consist of two parts: a service provided by SNP Poland (web service) and a software product (ABAP part) in the SAP system.

Capabilities of BP Data Checker:

- Checking business partners name (vendors/ customers/ BP)
- Checking business partners address data
- Checking Polish/EU VAT ID consistency
- Automation of vendor/customer master data creation (checking name, address data and VAT activity *, checking for VAT ID duplicates)
- providing API (function modules) to be used in own coding

* only using integration with NIP Checker product

1.1. Technical requirements

Component	Recommended version
Kernel	6.0 or higher

1.2. Package content

Basic transactions in BP Data Checker:

Transaction ID	Description
/BCC/JPB	BP Data Checker – starting checks and viewing checks logs
/BCC/JPB1	BP Data Checker – checking history
/BCC/JPB2	BP Data Checker – checking single business partner/ creating vendor/ customer
/BCC/JPBC	BP Data Checker – configuration
/BCC/JPBE	BP Data Checker – excluded strings
/BCC/JPBD	BP Data Checker – exchanged strings

Transaction /n/BCC/JPBC enables configuration. Configuration's details were described in installation guide.

Transactions /n/BCC/JPBE and /n/BCC/JPBD allows configuration of string removal/exchange before comparison (ex. Removal of substring "street" from address.

Transaction /n/BCC/JPB is a basic transaction of the BP Data Checker solution that enables checking partners name/address data in Polish REGON and European Union VIES database.

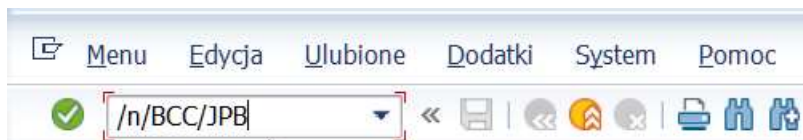
Transaction /n/BCC/JPB1 allows to display checks history.

Transaction /n/BCC/JPB2 allows to analyze single VAT ID and facilitates creation of vendor/ customer.

2. Transactions and programs

2.1. BP Data Checker - main transaction

To use that product it is necessary to call transaction /BCC/JPB by inserting sequence /n/BCC/JPT or call transaction by user menu.



2.2. BP Data Checker - main transaction – selection screen

After starting transaction, screen with selection parameters will appear

 A screenshot of the 'BP Checker - logs and mass master data checking' selection screen. The screen has a title bar with the text 'BP Checker - logs and mass master data checking'. Below the title bar are three icons: 'Check connection', 'Tax ID history', and 'About application'. The main area is divided into sections. The first section is 'Organizational units' with a 'Company code' field. The second section is 'Reporting d... the VAT no checking log' with fields for 'Date to' (01.05.2018), 'Date from' (09.05.2018), 'SAP user' (to), 'Usage type' (SID), 'Key substring', and 'ALV list variant'.

Important icons are placed on icon's bar:

Icon name	Icon description
Check connection	It validates connection with BP Data Checker service
Check history	Switches to /n/BCC/JPB1 transaction allowing to display the history of checking.
About application	It displays product version number/ allows checking for update and direct to newest manuals webpage.

At the top part of the selection screen data restrictions for displaying checking log records (ALV list) are present. Meaning of that fields is described in following table:

Field name	Field description	Required/ Optional/ Not inserted	User activity and value	Comment
Company Code	Company code against which the authorization will be checked (see USE_JPN_AUTH_OBJECT parameter in installation manual)	Required	Manual entry/picklist	The company code is also used to: - define default files directory (parameters FILE_DEF_PATH, FILE_DEF_SAP) - limit the checks for vendors/ customers to given CC (see parameter FILTER_COMP_CODE)
Date from	Start date of tax ID's check	Required	Manual entry/picklist	
Date to	End date of tax ID's check	Required	Manual entry/ picklist	
SAP user	User who executed analysis.	Optional	Manual entry/ picklist	Option
Usage mode	Define ID of usage mode – first 3 letters of ID validation sequence (file name)	Optional	Manual entry/ picklist	Option Default usage mode in transaction /BCC/JPB is CHK. User who creates extension by API uses usually another usage mode (SID/GID). Mentioned functionality makes it simpler to identify where validation was initiated in system.
Key substring	Define substring used for filtering results	Optional	Manual entry	Field that was left empty is not filtering results. It helps to find an log entry.
ALV list variant	Define structure of ALV list's columns	Optional	Manual entry/ picklist	Default columnar structure is delivered with product.

In the down part of the selection screen selections for check execution are given.

On can

- checking name/address data of suppliers/receivers/business partners master data,
- checking tax IDs of XML JPK_VAT file (hidden by default, can be used to filter partners data check)
- checking tax IDs that was manually entered (can be used to filter partners data check),
- checking tax ID that was determined by user extension (hidden by default)
- checking tax ID activity (* only together with NIP Checker Product)

Checking options

Business partners checking

☐ Check vendors

Vendors to

☐ Filter on creation date 0

☐ Do not show locked

☐ Check customers

Customers to

☐ Filter on creation date 0

☐ Do not show locked

☐ Check business partners

Business partners to

Business partner roles to

☐ Filter on creation date 0

☐ Do not show locked

Filters/ additional selections

☐ Check VAT IDs from file

File data check

JPK file to be checked

☐ SAP folder

XML attribute with VAT Numb NrKontrahenta;NrDostawcy

☐ Check VAT IDs given manually

Given VAT numbers check

VAT numbers to be checked

Processing options

☐ Check VAT ID activity

☐ Ignore domestic TAX ID prefix

Important:


The selection screen of transaction /n/BCC/JPB depends on configuration. Some parts of this screen can be hidden, if not used – see configuration parameters SHOW_VEND_CUST, SHOW_BP, SHOW_NIPC, SHOW_EXIT, SHOW_FILE in installation manual.

Following table describes the meaning of screen fields:

Field name	Field description	Required/ Optional/ Not inserted	User activity and value	Comment
Vendors/ Customers tax ID check (shown if SHOW_VEND_CUST parameter is not empty)				
Check vendors	Determine if supplier's data will be checked	Optional	Checkbox selection	
Vendors	Define vendors checking range	Optional	Manual entry/ picklist	Undeclared range means that all of suppliers will be checked
Filter on creation date / creation date/ offset	<p>If ticked and date is declared, only vendors created on or after declared date will be checked</p> <p>If ticked and start date is empty and offset is given (default 0), then start date will be calculated on the base of current day and offset (e.g. offset = 1, tells to check all partners created starting from yesterday)</p>	Optional	Manual entry/ picklist	<p>Unticked checkbox means that all of suppliers will be checked</p> <p>Offset is prepared especially for use in background jobs together with actions executed after checking</p>
Do not show locked	If checked then master data records for locked partner (either globally or at company code level are excluded from processing	Optional	Checkbox selection	
Check customer	Determine if customers' data will be checked	Optional	Checkbox selection	
Customers	Define receivers checking range	Optional	Manual entry/ picklist	Undeclared range means that all of receivers will be checked
Filter on creation date / creation date / offset	<p>If ticked and date is declared, only customers created on or after declared date will be checked</p> <p>If ticked and start date is empty and offset is given (default 0), then start date will be calculated on the base of current day and offset (e.g. offset = 1, tells to check all partners created starting from yesterday)</p>	Optional	Manual entry/ picklist	<p>Unticked checkbox means that all of customers will be checked</p> <p>Offset is prepared especially for use in background jobs together with actions executed after checking</p>
Do not show locked	If checked then master data records for locked partner (either globally or at company code level are excluded from processing	Optional	Checkbox selection	
Business Partner's tax ID check (shown if SHOW_BP parameter is set to X)				

Check BP	Determine if BPr's tax ID will be checked	Optional	Checkbox selection	
Business Partners	Define BP checking range	Optional	Manual entry/ picklist	Undeclared range means that all of BPs will be checked
BP role	Allows filtering via roles of BP			Undeclared means that BPs in all roles will be checked
Filter on creation date / creation date / offset	<p>If ticked and date is declared, only partners created on or after declared date will be checked</p> <p>If ticked and start date is empty and offset is given (default 0), then start date will be calculated on the base of current day and offset (e.g. offset = 1, tells to check all partners created starting from yesterday)</p>	Optional	Manual entry/ picklist	<p>Undeclared date or unticked checkbox means that all of BP will be checked</p> <p>Offset is prepared especially for use in background jobs together with actions executed after checking</p>
Do not show locked	If checked then master data records for locked partner (either globally or at company code level are excluded from processing	Optional	Checkbox selection	
File validation				
JPK file to be checked	JPK file to be checked	JPK file to be checked	JPK file to be checked	JPK file to be checked
SAP Folder	SAP Folder	SAP Folder	SAP Folder	SAP Folder
XML attribute list with tax ID	XML attribute list with tax ID	XML attribute list with tax ID	XML attribute list with tax ID	XML attribute list with tax ID
Check of inserted tax ID				
Tax IDs to be checked	Checking declared tax IDs	Optional	Manual entry/ picklist	Empty tax ID's field means that tax ID will not be checked
Values from extension/user exit (shown if SHOW_EXIT parameter is set to X)				
Values from User Exit validation	Execute values checking by user exit ZX_BCC_JPB_T001s ZX_BCC_JPB_T001	Optional	Checkbox selection	<p>In "include" that was created by user it is necessary to fill table:</p> <p>lt_VATNO4 type /BCC/JPB_TT_VATNO.</p>
Processing				
Check VAT ID Activity	If checked, VAT activity will be checked additionally in the background (user can refresh the report until result appears).	Optional	Checkbox selection	Uses integration with NIP Checker product

Ignore Domestic prefix	If Checked PL prefix will be removed from VAT ID and VAT ID with this prefix will be checked against REGON database	Optional	Checkbox selection	
------------------------	---	----------	--------------------	--

To execute the report user has to press execution icon (F8) .

2.3 BP Data Checker – main transaction – reporting screen

After executing the report, ALV list that displays logs of checking tax IDs will appear:

Logs of business partner data check												
Date:		01.05.2018 – 09.05.2018										
Service user:		test										
BP status	Activ. stat	Record date	Time	User	Checking process key	Duration	Error code	Records	Ext. rec.	Serv. error	TCode	Part. check CoCd
		09.05.2018	12:57:33	SIWIECK	CHB>20180509_125733_SIWIECK_MANY	14	0	34	27		/BCC/IPB	X Y001
		08.05.2018	14:59:35		CHB>20180508_145935_SIWIECK_MANY	435	0	4.962	4.830	103	/BCC/IPB	X SA00
			14:57:50		CHB>20180508_145750_SIWIECK_MANY	0	0	4.962	0	3%	/BCC/IPB	X SA00
			14:49:35		CHB>20180508_144935_SIWIECK_MANY	0	0	4.962	3		/BCC/IPB	X SA00
			13:57:36		CHB>20180508_135736_SIWIECK_MANY	869	0	4.962	4.830	103	/BCC/IPB	X SA00
		05.05.2018	09:00:42		GLB>20180505_090042_SIWIECK_7831007209	0	0	1	0		/BCC/IPB2	Y001
			08:59:46		GLB>20180505_085946_SIWIECK_7831007209	0	0	1	0		/BCC/IPB2	Y001
			08:55:03		CHB>20180505_085503_SIWIECK_MANY	0	0	34	0		/BCC/IPB	X Y001

Following table describes the meaning of fields:

Field	Description
BP Data Checking status	Overall status of checking run: - at least one of tax IDs could not be found in the database or is incorrect - all of tax IDs are OK (no errors and warnings) - in processing
NIP Activity checking status	- at least one of tax IDs is incorrect or inactive - at least one of tax IDs is released (warning) - all of tax IDs are OK (no errors and warnings) - in processing
Record date	Date when log's entry was created
Time	Time when log's entry was created
User	User who executes checking
File	Log's unique ID. If ticked then checking log's ID is a file name (without extension)
Record	Amount of all records that are validated
External record	Amount of all records that was validated externally (records set to be ignored in configuration are not checked, e.g. empty value or incorrect syntax)
Error code	0 means that check was finished with positive result (value >0 means that error occurred)
External services errors	Empty value means that no errors were found. Possible error codes: 100 – limit of monthly checks was exceeded 101 – incorrect service ID/ID2 102 – connection with BCC server failure 103 – connection with external service failure 104 – Tax ID is not supported by test gateway (supported numbers: 5213003700, 5252242171, 7171642051, 7272445205)

Double click on any of report log line bringing list with summarized or detailed information of selected log.

Double clicking on the *Activity check status* column you will make the details of NIP Checker activity checking result to be shown:

Type	Icon	Tax ID	Form	Tax ID	Message	Record date	Time	From cache	Cache data	Cache time	Information	Master data Lock
PL		5213003700	521-300-37-00	Number 5213003700 is exempted!		09.09.2017	16:21:17	X		09.09.2017	16:16:10	V-VZDO5TKS01-4V
PL		9561981454	956-198-14-54	Number 9561981454 is exempted!		09.09.2017	16:21:17	X		09.09.2017	16:16:10	V-VVGB,V-VVGBKS
PL		1111111111	111-111-11-11	Number 1111111111 is not active!		09.09.2017	16:21:17	X		09.09.2017	16:16:10	C-0000100009-P2,V-0000100001

Double clicking on any other column (other than *Activ.stat.*) will make the details of name/ address data check visible:

BP Checker - details - CHB>20180509_125733_STWIECK_MANY

On this BP Data Checker screen one can have a look at comparison results and use ribbon buttons (Master Data/ History/ Check/ Uncheck OK/ Manual data checking) to execute additional actions.

Master Data Button

Pressing this button after selecting any data row with business partner data to be checked will execute transaction to change this partner master data. Usually after such a change you want to refresh the report data with the refresh icon.

History

Pressing this button after selecting any report row will start report showing history of checks for the selected VAT ID.

Check/ Uncheck OK

This option allows to check selected rows as OK . Such rows will become green. The product will remember current name/ address data status when checking as OK. If later master data of this partner will be changed or the data fetched from external database will be different, the record will be automatically unchecked.

Manual check on WWW

Allows jumping to a WWW page having in clipboard the VAT id of the selected row. See parameter MAN_WEBPAGE in installation manual.

BP Data Checker – BP checking and BP creation

Transaction /n/BCC/JPB2 allows checking of a single business partner and creating vendor/ customer using retrieved for checking values. Additionally it makes possible:

- checking for duplicates
- checking VST number activity (* only together with NIP Checker product NIP)

Meaning of this screen fields is described in the table below:

Field name	Field description	Required/O ptional/Not inserted	User activity and value	Comment
Company code	CC used for authorization	OP.	Manual entry/ F4 selection	The CC may be used for authorizations and to select correct ID (see parameters USE_JPN_AUTH_OBJECT and ID)
VAT ID	VAT ID for which data will be retrieved and checked	OB	Manual entry	The format of the string may be unified with the configuration parameter VATNO_PL_FORMAT
Check VAT activity	Activates NIP Checker integration to validate VAT activity	OP	Checking/ Unchecking	
Check duplicate existence	Activates duplicate existence checking	OP	Checking/ Unchecking	See config parameters: DUPLIC_CHECK_DEF, SHOW_DUPLIC_CHECK
Execution				

Do nothing	If this option is checked, the data is only displayed.	OP	Selection field (radio)	
Create vendor	Allows vendor creation after pressing Execution icon (F8)	OP	Manual entry/ F4 selection	Vendor account group must be defined
Create customer	Allows customer creation after pressing Execution icon (F8)	OP	Manual entry/ F4 selection	Customer account group must be defined
BP master data retrieved (data filled after pressing Retrieve data button)				
VAT activity	Shows if VAT ID is active in MoF/ VIES databases (*integration with NIP Checker)		Display	
Duplicate existence	Shows if duplicates exists		Display	
Other BP data	Name and address data of business partner		Display/ Change	

Important! Because of validations specific for each SAP system, automatic creation of vendor/ customer master data may require filling in additional fields in user exits ZX_BCC_JPB_T003C/ ZX_BCC_JPB_T003V.

3. Usage of BP Data Checker's API

BP Data Checker shares application programming interface (API) by function modules:

Module	Parameter	Description
/BCC/JPB_API_VATNO_CHECK_ONE		Single tax ID's status check Usually parameter that is only shared is I_VATNO (optionally possible to pass I_USAGE – see bellowed description) E_RESULT – return structure E_FILENAME – output validation key E_LDATE, E_LTIME – log's date and time
Input parameters	I_VATNO	Tax ID to be checked (Polish tax ID or UE VAT number)
	I_INFO	Additional 40-character string that can describe record e.g: <i>Vendor no: 1234567890</i>
	I_COMPCODE	Company code (needed if service ID determination should be based on company code). See configuration parameter ID.
	I_USECACHE	Optional parameter. Tag which indicates cache usage (see configuration parameter in installation guide). If omitted, cache is in use ('X').
	I_FORCE_CACHE_VALID	Optional parameter. Forces cache validity to a given value that can be bigger by 31 days than standard one (can be 1000 – a month as well).
	I_TEST	Optional parameter. Tag that indicates checking's process in test mode (make use of BCC BP Checker's gateway). If omitted, gateway in productive mode is in use.
	I_USAGE	Optional parameter. Three-characters ID (usage type) which enables distinction of function call's source. If not declared, default value GID is used. See description of I_USAGE parameter below.
	I_FILENAME	Optional parameter. Usually not in usage. It enables setting external key (ID) of checking process. If omitted, key is set automatically - consist of USAGE TYPE, DATE, TIME, USER and additional information. Return value of output parameter: E_FILENAME.
	I_NOLOG	Optional. This parameter should not be used when calling directly (it is used by /BCC/JPB_API_VATNO_CHECK_ONE A.
Output parameters	E_RESULT	Return information about record that is already checked in structured format: VATNOF – VAT number in input format VATNO – VAT number validated without delimiter COUNTRY- country's prefix in case of VAT EU PL – indicates if VAT number is known as PL Tax ID EU- indicates if VAT number is known as VAT UE OT – indicates that VAT number is unknown as PL tax ID or VAT UE CODE – validation result code TECHDESC – technical code description DESC – checking result description FROMCACHE – is result gathered from CACHE CDATE – information when record checking was kept in CACHE CTIME – information when record from CACHE was checked INFO – additional string given when calling checking Name/ Address fields S1 * retrieved from external server
	E_FILENAME	It contains validation key. Validation key could be used to find logs and e.g. displays pop-up with information about log (see API module /BCC/JPB_API_LOG_POPUP)
	E_LDATE	Return log on date. Usage same as validation key.
	E_LTIME	Return logged time. Usage same as validation key.
/BCC/JPB_API_VATNO_CHECK_MANY		Checking status of numerous tax IDs (more efficient for larger quantity of tax IDs than calling single tax ID by CHECK_ONE). Parameters same as in CHECK_ONE but input data and results are displayed in table.
Input parameters		Same as /BCC/JPB_API_VATNO_CHECK_ONE but I_VATNO is a table that contains numerous VAT numbers, not single VAT number.

Output parameters		Same as /BCC/JPB_API_VATNO_CHECK_ONE but E_RESULT is a table that contains numerous results, not single result.
/BCC/JPB_API_CHECK_AUTH		Checks if the user is authorized for a given company code for NIP checks.
Input parameters	I_COMPCODE	Company code. See configuration parameters ID and USE_JPN_AUTH_OBJECT.
Output exeptions	CC_AUTHORITY_ERROR	Exception returned when user does not have enough authorizations.

Sometimes one would like to add *Usage type* (parameter I_USAGE) to distinguish records which are validated by API (in logs). For that reason it is necessary to add entry in /BCC/JPB_DB_USG table (transaction SM30 on development environment) that begins with "Z" letter and has only 3 UPPER-CASE letters.

EXAMPLE:

ZU1

It is not recommended to generate I_FILENAME parameter manually (it is recommended to left it empty during call and receive E_FILENAME parameter generated by system). If user wants to generate validation key externally, it has to be unique, easy to identify and consist of UPPER-CASE letters/ numbers and delimiters. It is good to include validated object number, DATE and time in mentioned validation key.

Example:

20170602_120345_ID_OBJECT

4. BP Data Checker – user extensions

User extensions included in BP Data Checker:

Type / Extension	Description
<p>Extension of /BCC/JPB program and transaction EXIT area (additional selection for VAT IDs)</p> <p>INCLUDE ZX_BCC_JPB_T001S – screen parameters for EXIT area (see transaction code /BCC/JPB/)</p> <p>INCLUDE ZX_BCC_JPB_T001 (see function module /BCC/JPB_OTH_UEXIT_T001)</p>	<p>This extension of transaction /BCC/JPB enables choosing tax IDs to be validated by custom ABAP code.</p> <p>In created INCLUDE ZX_BCC_JPB_T001S it is possible to add selection parameters in EXIT block of transaction screen /BCC/JPB for processing later in INCLUDE ZX_BCC_JPB_T001.</p> <p>In INCLUDE ZX_BCC_JPB_T001 it is necessary to add logic that fills table: CT_VATNO type /BCC/JPB_TT_VATNO_INF</p>
<p>Extension to ignore checking of some TAX ID numbers</p> <p>INCLUDE ZX_BCC_JPB_I001 (see function module /BCC/JPB_OTH_UEXIT_I001)</p>	<p>Allows exclude some TAX ID numbers from checking (note that some numbers can be excluded via configuration as well).</p>
<p>Extension allowing changing ALV checks output list:</p> <p>Messages change (summary): ZX_BCC_JPB_M001 (Interface /BCC/JPB_OTH_UEXIT_MESS)</p> <p>Message change (details and history) ZX_BCC_JPB_M002 (Interface /BCC/JPB_OTH_UEXIT_MESS_DET)</p>	<p>In these user exits it is possible to change the content of the tables with messages to be displayed to the user after filling them by standard procedures.</p>
<p>Extension to select TAX id for customer, vendor and business partner: ZX_BCC_JPB_TN4C, ZX_BCC_JPB_TN4V, ZX_BCC_JPB_TN4B And relevant function modules /BCC/JPB_OTH_UEXIT_TN4C, /BCC/JPB_OTH_UEXIT_TN4V, /BCC/JPB_OTH_UEXIT_TN4B.</p>	<p>With these user exits one can select TAX ID from master data of Customers (C), Vendors (V) and Business Partners (B).</p>
<p>Extensions of comparing retrieved BP data with SAP master data</p> <p>Include zx_bcc_jpb_cmp1 w /BCC/JPB_OTH_UEXIT_CMP1 allows adding additional checks to be placed in C_MESS - COMP_USER1 i C_MESS -COMP_USER1</p> <p>Include zx_bcc_jpb_cmpa w /BCC/JPB_OTH_UEXIT_CMPA allows creation of own comparison logic and setting the parameter C_OVERWRITE = ABAP_TRUE will deactivate standard comparing logic. See also FM /BCC/JPB_OTH_TL_COMP_MESS_DET implementing standard comparison.</p>	<p>TO adjust or implement own comparison logic</p>
<p>Extensions of program /BCC/JPB2 – verify/ create partner</p> <p>Selection screen extensions /BCC/JPB2 INCLUDE ZX_BCC_JPB_T100S. INCLUDE ZX_BCC_JPB_T110S.</p>	<p>Za pomocą tych rozszerzeń można dodać dodatkowe pola do ekranu selekcji tworzenia kontrahenta oraz rozszerzyć parametry przekazywane do procedury pobierania danych kontrahenta.</p>

<pre> INCLUDE ZX_BCC_JPB_T120S. INCLUDE ZX_BCC_JPB_T130S. INCLUDE ZX_BCC_JPB_T180S. INCLUDE ZX_BCC_JPB_T190S. Additional copying logic into screen fields /BCC/JPB2 (when icon Retrieve data used). INCLUDE ZX_BCC_JPB_T003. Creation of customer INCLUDE ZX_BCC_JPB_T003C. Creation of vendor INCLUDE ZX_BCC_JPB_T003V. Duplicate checking: INCLUDE ZX_BCC_JPB_T003_DUPL </pre>	
--	--

5. BP Data Checker configuration

BP Data Checker configuration was described in installation guide:
(*BP_Checker_InstallationManual_EN_data.pdf*)

6. Additional information

More information about BP Data Checker could be found in installation guide
(*BP_Checker_InstallationManual_EN_data.pdf*) and on Addons by BCC forum: <https://addons.snp-poland.com>