THE INFLUENCE OF ENGLISH ON POLISH MORPHOLOGY

The aim of the present paper is to show that the influence of English is not only limited to the area of lexical borrowing. Non-lexical influence includes, for instance, occasional introduction of the genitive -s, semantic loans, loan translations and morphological modifications. Four English combining forms: -gate, -(a/o)holic, cyber-, e- have been selected for the analysis. The research material for the study comes mainly from the National Corpus of Polish as well as from some earlier publications on new morphological developments in Polish. The morphological and semantic analysis of the four combining forms include: the origin/s of each morpheme, their meaning/s, the type of morphemes they attach to, spelling rules, other information if applicable, e.g. gender, feminine counterparts. The adoption of English combining forms results in the adoption of a foreign word-formation rule that has become productive in Polish.

KEYWORDS: non-lexical influence of English, morphological loans, word-formation rules

INTRODUCTION

It cannot be denied that the influence of English on Polish has drastically increased recently if we look at it from the historical perspective. The process proper of borrowing from English into Polish began during the 18th century. It is only in the 19th century, however, that a gradual increase in the impact of English on Polish becomes apparent in the sociolinguistic scene in Poland – a development reflecting the general trend in Europe at the time. The 20th century saw a steady increase of Anglicisms in Polish, but it was not until the second half of the 20th century that the influence of English gained noticeable significance. Since the middle sixties, the heyday of the Beatles and the start of the spread of “pop-culture,” English has become ever more popular the world over. In Poland, however, for the most part of the communist era it was fairly difficult for Poles to make contact with the English language either via the mass media or via visits to English-speaking countries – notably, Great Britain and the USA. The changes in the political system in Poland in 1989 altered all that. Since then, Polish society has opened to Western
influences and, as a consequence, interest in the culture, new technologies, and other aspects of life in Great Britain and the United States in particular has grown noticeably. Large numbers of people, especially among the younger generation, have begun to learn English.

These factors, along with the fairly easy access to English mass media, including the Internet, have promoted contact between English and Polish and, consequently, have increased the influence of English on the Polish language. The impact has for the most part been in the area of lexical borrowing, although there is evidence of other types of influence. Non-lexical changes include apart from the impact of English on Polish morphology, which, as the title indicates, is the subject-matter of the present paper, the following:

1. Occasional introduction of the genitive -s added to Polish names, e.g. Witek’s ‘name of a firm’ (Mańczak-Wohlfeld 1993: 280).
2. Infrequent introduction of the English plural marker -s instead of the Polish -y, for instance Buts ‘a shoe factory’, Galons ‘a music band’.
3. Introduction of clipped names in official language, e.g. Radek Sikorski < Radostaw Sikorski (a former minister of foreign affairs and an MP).
4. Use of semantic loans, e.g. the phrase dokładnie tak is overused under the influence of English precisely, exactly (Witalisz 2007).
5. The use of loan translations, e.g. W czym mogę pomóc / Czy mogę pomóc? translated directly from the English Can I help you? Similarly, Miłego dnia / weekendu (< E. Have a nice day/ weekend) (Witalisz 2015).
6. Impact of English on Polish syntax, which is evidenced by the adoption of right-headed noun+noun compounds, a hitherto unknown type in Polish, for example fliz shop (‘tile shop’), hurt-land (‘wholesale’), Sobieski crown (Sobieski = a Polish king’s name) as well as in compounds containing no English loanwords, e.g. auto lakiernia (‘car varnish’), auto złom (‘car scrap’) (Mańczak-Wohlfeld 1993: 281; Witalisz 2009).
7. Widespread prepositioning of adjectives, which is contrary to Polish word order, e.g. formalna analiza instead of analiza formalna (‘formal analysis’).
8. Influence of English on the graphic level, which is observed in billboards, e.g. szlafrOK ‘a dressing gown’, 4 you ‘for you’.

We can, therefore, conclude that due to a considerable inflow of Anglicisms as well as of other linguistic elements of English origin, the face of Polish has been somewhat altered (Mańczak-Wohlfeld 2004, 2008).

Although most publications concerned with the impact of English on Polish are devoted to the lexical influence, a few scholars point to the above mentioned non-lexical influence of English on the Polish language. A number of articles discuss the widespread usage of such morphemes as -gate (Kreja 1993, Lubecka 2004, Wyrwas 2004), e- (Zabawa 2004, Data 2009a, b), -ing (Jochym-Kuszlikowa 2005,

RESEARCH MATERIAL

We have selected for the analysis four English combining forms: -gate, -(a/o)holic, cyber- and e- used as parts of Polish compound words. Their grammatical status is not set (both in Polish and in English) as they are defined as either combining forms or affixes in different dictionaries and works on morphology.\(^3\) In a few works they are referred to generically as word-forming elements, which suggests the difficulty in deciding on their status. Some scholars regard parts of compounds which reappear in a whole series of compounds as affixes (e.g. Orzechowska 1984). A way out proposed by some Polish scholars is to label them as affixoids (cf. Jadacka 2001: 35). While resolving a dispute over morphological terminology is not our goal, following the majority of lexicographic works and argumentation provided there, we shall treat word-forming elements such as -gate, -(a/o)holic, cyber- and e- as combining forms used to derive compound words.

The research material for the present study comes from the National Corpus of Polish as well as from previous studies on new morphological developments in Polish (see References). The semantic and morphological analysis of the four combining forms includes:
1) the origins/provenance of each morpheme
2) their meaning(s)
3) the types of morphemes they attach to
4) spelling rules, whether compatible with English
5) other information if applicable, e.g. gender, feminine counterparts, etc.

\(^1\) Originally from Gr. hólos ‘whole’ (SJPDor); in English -aholic has been extracted from the lexeme alcoholic and it denotes ‘being addicted to’ (RH, MW). In this meaning it has been borrowed into Polish.

\(^2\) Originally from Gr. kybernētikós ‘steering’ (SJPDor); in English it refers to computers as well as the Internet and in this meaning it has been borrowed into Polish.

The morpheme -gate was originally extracted from American English Watergate in 1972. Following this model, other -gate formations appeared in English, e.g. Irangate, moneygate, Zippergate, Monicagate, Spygate, Wheatgate, Travelgate, etc. Some of the English expressions have been borrowed into Polish as loanwords, e.g. Watergate, Irangate, Travelgate, moneygate, Lewinskygate or loanblends, e.g. rozporekgate (< E. zippergate), and later provided a productive word-formation pattern. While -gate is generic, the element that is attached to it is specifying and it is replaced in every new expression. The National Corpus of Polish lists 140 lexemes with -gate, which all refer to ‘some kind of scandal, often involving the concealment of wrongdoing’.

-gate is attached to native and foreign bases of the following types:
1) personal names (both first and last names) and pseudonyms (50 instances), e.g. Begergate, Katarzyna Gate, kohlgate, Izabela-gate,
2) names of places, companies, sports clubs, airports and others (25), e.g. Afganistangate, Aspirynagate, Słupsk-gate, Okęcie gate,
3) acronyms and clippings (16), e.g. SB-gate, HIV-gate, VAT-gate, PKO-gate, bibliogate,
4) common nouns (34), e.g. Kasynogate, Komisja-gate (‘commission-gate’), ratuszgate (‘cityhall gate’), wódka-gate (‘vodka-gate’),
5) foreign words (which combined with -gate refer to Polish reality) (15), e.g. laptop-gate, Mozarella-gate, rubel-gate, Waterclosetgate.

In most cases the base before -gate appears in its full form; polysyllabic bases are on occasion clipped before the addition of -gate, e.g. bibliogate (from biblioteka ‘library’), dinogate (from dinoszaur ‘dinosaur’), Jugogate (referring to former Jugoslavia). Spelling is unstable, most often -gate attaches to the base without a hyphen, though there are also cases with hyphenated and separate spellings. When the same -gate expression is used in several texts, it may be spelt differently every time.

On occasion, in texts reporting on some wrongdoing -gate is used as an autonomous lexeme and a synonym to ‘scandal’. -gate formations happen to be used with Polish afera ‘scandal’ as if explaining the meaning of the foreign -gate, e.g. ‘była afera Szydłowski-gate’ (‘there was Szydłowski-gate scandal’), “afera Giertych-gate” (‘Giertych-gate scandal’), which results in tautological expressions (examples after Zabawa 2009: 34-35). Sometimes -gate is attached to nonce compounds that were created to refer to a specific event, e.g. Rokita-Lufthansa-gate (ibid.: 38).

It is possible in a few contexts to determine the grammatical gender of -gate in Polish. It is usually feminine, most probably by analogy to Polish afera (fem.)

4 One of the first -gate occurrences which appeared in 1986, i.e. before the political change took place in Poland.
meaning, as stated above, ‘scandal’. Gender is marked by inflectional morphemes attached to verb forms or to modifying pronouns and adjectives, e.g. “Eros gate rozwikłana”, “Nasza Agent gate to ... nie Water gate” (examples after Kreja 1993: 67, Zabawa 2009: 35). In one context only it is masculine: “groźniejszą aferą od schnapsgate-u”. The last example illustrates that formations with -gate may be declined, following the Polish inflectional paradigm.

The word-formation pattern represented by formations with -gate is untypical of Polish. Right-headedness in Polish compound words is normally conditioned by the appearance of the interfix -o- and the modifying element never appears in the form of an uninflected noun. All the -gate expressions in Polish break this rule through copying the English word-formation pattern, which means that the influence of English in this case is not restricted to the borrowing of a bound morpheme but that it penetrates deeper into the derivational system of Polish.

To sum up, the productivity of -gate in Polish is always inversely proportional to the uprightness of political or economic powers. Although -gate is listed in a Polish dictionary of foreign words (WSWO), -gate formations, having very specific reference, do not become institutionalized as part of the Polish lexical system.

-(o)holik (an adapted form of E. -(a/o)holic)

The morpheme -(a/o)holic has been extracted from English alcoholic and used productively in: sugarholic, foodoholic, workaholic, golfaholic, chocoholic, and shopaholic. Polish has borrowed several English loanwords, e.g. workaholik (< E. workaholic), szopoholik (< E. shopaholic), dataholik (< E. dataholic), czatoholik (< E. chataholic) and two loanblends: pracoholik (< E. workaholic) and sklepoholik/zakupoholik (< E. shopaholic), in which the original English -(a/o)holic has been adapted graphically and phonetically to Polish -(o)holik. They all indicate ‘a person who is addicted to or obsessed with an object or activity’. Polish -(o)holik expressions are almost as frequent as those with -gate. The National Corpus of Polish enumerates 81 examples with -(o)holik, which we have divided into the following five categories:

1) common nouns with -oholik (46 instances), e.g. cukroholik (‘sugarholic’), internetoholik, newsoholik, sklepoholik (‘shopaholic’),

2) common nouns with -holik (2), e.g. belkotholik (‘mumbleholic’), internetholik,

3) common and proper nouns with -oholiczka, which indicates the feminine gender (19), e.g. herbatoholiczka (‘female teaholic’), seksoholiczka (‘female sexaholic’), wikipedioholiczka, teleholiczka,

4) proper nouns with -oholik (4), e.g. islandoholik (‘Icelandoholic’), Wikipedioholik,

5) clippings and acronyms combined with -(o)holik/holiczka (10), e.g. wikipholik, socjoholik (‘socioholik’), TVholik, muzoholiczka (‘female musicoholic’).
The spelling of all -(o)holik formations in Polish is stable. Out of 81 items collected, 21 are used in the feminine gender which is marked by the Polish suffix -ka added to -(o)holik (> -(o)holiczka). It is worth noting that 11 such examples have their masculine counterparts, e.g. zakupoholik and zakupoholiczka (‘he shopaholic’ and ‘she shopaholic’), książkoholik and książkoholiczka (‘he bookaholic’ and ‘she bookaholic’).

cyber-

The morpheme cyber- has been extracted from English cybernetics and used productively to form other cyber- formations in English, such as e.g.: cybertalk, cyberart, cyberspace. With the advent of computers and the Internet Polish has borrowed English cyber- lexemes both in the form of loanwords, e.g. cyberetyka (< E. cybernetics), cyberrupt (< E. cyberpunk), cyberseks (< E. cybersex), cybersquatting, cyber risk, and loanblends, e.g. cyberprzestrzeń (< E. cyberspace), cyberglina (< E. cybercop), cyberwonna (< E. cyber-warfare), cyberspołeczność (< E. cybercommunity), cyberświat (< E. Cyberworld), cyber poniedziałek (< E. Cyber Monday), cyber przemoc (< E. cyberbullying), cyber atak (< E. cyberattack). They have become a pattern for over 300<sup>5</sup> Polish cyber- formations (NKJP), in which the morpheme cyber- means, following its English etymon, ‘relating to, or involving computers or computer networks (such as the Internet)’. In Polish, cyber- is attached to:

1) common nouns (285 examples), e.g. cyber-miasto (‘cyber-city’), cyber obywatel (‘cybercitizen’), Cyber policja (‘cyberpolice’), cyber żołnierz (‘cybersoldier’),
2) proper nouns (7), e.g. Cyber Kraków, Cyber Wielkopolska (‘cyber Greater Poland’), Cyber-Stalin, cyber-Europa,
3) adjectives (12), e.g. cyberdowcipny (‘cyberjocular’), cyber-dance’owy (‘cyber-dance’), cyberkulturalny (‘cybercultural’),
4) and to one verb: cyber realizować (‘to cyber realize’).

The resulting compound words are usually unhyphenated, except for a few adjectives. Cyber happens to be used in Polish also as a free morpheme, either to postmodify, e.g. pieniążce cyber (‘cybermoney’), or premodify nouns, e.g. cyber muzyka (‘cybermusic’). Polish compounds with cyber- are often used interchangeably with two-word phrases involving the adjective cybernetyczny (cybernetic), e.g. cybersieć (‘cyberweb’) co-exists with sieć cybernetyczna (‘cybernetic web’), where cybernetyczny means ‘related to the Internet, computer, electronic, virtual’.

---

<sup>5</sup> There are 317 formations with cyber- in the analyzed material but some of them are loanwords or loanblends from English.
e-

*e-* is a clipped form of English *electronic* and was used perhaps for the first time in the word *e-mail* (AHD). A number of English *e-* formations modelled on *e-mail* have been borrowed into Polish, again either as loanwords, e.g. *e-book*, *e-banking*, *e-biznes* (*< E. e-business*), *e-commerce*, *e-production*, *e-service*, *e-learning*, *e-tools*, *e-solutions*, *e-author*, *e-market*, or loanblends, e.g. *e-rynek* (*< E. e-market*), *e-handel* (*< E. e-trade*), *e-książka* (*< E. e-book*), *e-konto* (*< E. e-account*), *e-społeczność* (*< E. e-community*), *e-papierosy* (*< E. e-cigarettes*). *E-* is listed as a separate entry in dictionaries of foreign words in Polish (SZA, WSWO), meaning ‘electronic, online, indicating the involvement of the Internet’. *E-* formations appear as names of online shops and companies, as names of webpages of various institutions as well as of websites that provide information related to all sorts of issues, from dating, through cooking and roof building to legal advice.

In the National Corpus of Polish 186 cases of *e-* formations are listed. The morpheme *e-* attaches to:

1) common nouns (161 examples), e.g. *e-demokracja* (‘e-democracy’), *e-urzęd* (‘e-office’), *e-advokat* (‘e-lawyer’), *e-kontrola* (‘e-control’),
2) proper nouns, including place names, titles of newspapers, books and personal names (10), e.g. *e-Polska* (‘e-Poland’), *e-“Rzeczpospolita”*, *e-Biblia* (‘e-Bible’), *e-Beata*,
3) verbs (2): *e-mailować* (‘to e-mail’), *e-handlować* (‘to e-trade’),
4) adjectives (7), e.g. *e-cyfrowe* (‘e-digital’), *e-wydawniczy* (‘e-publishing’),
   *e-książkowy* (‘e-book’), *e-sportowy* (‘e-sport’),
5) an adverb (1): *e-mailowo* (‘e-mail’),
6) and acronyms (5), e.g. *e-PKO* (‘e-PKO bank’), *e-sklep RTV* (‘e-RTV shop’).

The combining form *e-* always appears in lower case, even in proper names, where it is the other element that is capitalized, e.g. *e-Planeta*, *e-Polska*, *e-Biblia*. *E-* formations are mostly hyphenated, though in a few cases the hyphen is dropped, e.g. *ekartka* (‘e-card’), *erodzice* (‘e-parents’). The pronunciation of *e-* is either Polish /i/ or /ɛ/, which is most probably conditioned by the speakers’ knowledge of English since in Polish the letter *e* is always pronounced as /ɛ/. The inflection of Polish *e-* formations does not pose any problems since the second element is native or a well-assimilated loan, capable of being inflected according to Polish grammatical paradigms.

*e-* formations are often used interchangeably with compound words including either the unabbreviated form *electronic* or other combining forms such as *cyber-* and *tele-*., as well as adjectives *internetowy* (‘Internet’), *wirtualny* (‘virtual’) and *cyfrowy* (‘digital’) (Ochmann 2004: 195; Zabawa 2004: 59), e.g.:

1) *e-podpis* (‘e-signature’) co-exists with *podpis elektroniczny* (‘electronic signature’), *cyberpodpis* (‘cybersignature’), *cyfrowy podpis* (‘digital signature’),
2) *e-praca* (‘e-job’), *telepraca* (‘television’),
3) *e-sklep* (‘e-shop’), *sklep internetowy* (‘Internet shop’).
The analytical expressions are usually used to explain the meaning of the premodifying e-.

A special use of e- is attested in contaminations such as e-ntuzjazm (e- + entuzjazm ‘enthusiasm’), e-dukacja (e- + edukacja ‘education’), e-kspert (e- + ekspert ‘expert’), e-lektorat (e- + elektorat ‘electorate’) (Ochmann 2004: 197). In a few cases, e- and e have been used separately, e.g. “E” w wyborach 2001 (‘E in the 2001 elections’), E-, po co to? (‘E-, do we need it?’) (Ochmann 2004: 198; Zabawa 2004: 58).

Finally, it is interesting to note that Polish speakers create lexical innovations with the combining form i-, meaning ‘Internet, informative, interactive’, pronounced as /i/, which is an abbreviated form of the lexeme Internet. I- formations are, perhaps, created by analogy with e- formations or by analogy with the names of Apple products such as iMac, iPad, iPod, iBook. Dictionaries of English do not list i- as a separate combining form. Perhaps the reasons for the productivity of i- in Polish should be looked for in the phonetic similarity between the English combining form e- /i:/ and the Polish letter i- /i/, and in the lucky coincidence that the word Internet starts with the letter i, pronounced in Polish as /i/. I- formations are much less numerous than the expressions with e- and the 13 examples found in the National Corpus of Polish include e.g.: i-aukcja (‘i-auction’), i-książka (‘i-book’), i-słownik (‘i-dictionary’), i-apteka (‘i-pharmacy’), i-bazar (‘i-(open-air)market’) and i-banking, the last one perhaps a loanword from English. I- formations are relatively new in Polish.

CONCLUSIONS

To sum up, all of the combining forms discussed above are taken over from English as parts of polymorphemic loanwords. If a number of loanwords share the same element, they are analyzed morphologically by Polish native speakers, which is often facilitated by their fairly good command of English. Then, the English combining forms are used productively in Polish by analogy to English expressions. They become independent and active derivational means for the creation of whole series of expressions, which are easily interpreted semantically (Waszakowa 2005: 19; Witalisz 2014: 328).

It is important to emphasize that the word-formation pattern used in the discussed formations is not typical of Polish. The adoption of English combining forms results, in this case, in the adoption of a foreign word-formation rule that
has become productive in Polish. Most of the formations are hybrid creations, formed from English and Polish morphemes and having no equivalents in English.

The tendency to create the -gate, -(o)holik, cyber- and e- formations reflects their pragmatic function, which means semantic brevity and preciseness, formal transparency and conciseness. Besides, they catch readers’/hearers’ attention and make the language lexis more international.

REFERENCES


DICTIONARIES AND CORPORA


### APPENDIX 1: FORMATIONS WITH -GATE

| -gate + names of place, company, sportsclub and other | Afganistangate, Agoragate, Aspirynagagate, Bogatingate, Bornitgate, Erosagate, Floragagate, Irakgate, Kiewgigate, Lęborkgate, Lubingate, Magdalenagagate, marlborogagate, Okęcię gate, Orlengate, Pakasagagate, Parystgate, Polskagagate, PROXY-gate, Samoagagate, Słupia-gate, Słupsk-gate, Starachowicegate, Szczerkowianagagate, Wodnikgate |
| -gate + acronyms, clippings | bibliogagate, dinogagate, FOZZ-gagate, GSMgagate, HIV-gate, Jugogagate, NFI-gate, pecgagate, PKO-gate, Sanepid-gagate, SB-gate (1986), tiwigate / tivi-gate, VAT-ergate, VAT-gate, WIT gate / WITgagate, X-gate |
| -gate + common nouns | Afergagate, Agentgate, budżetgagate, chemikagate, ciapagagate, cytrynygagate, Drogówkagate, flaga-gate, fonografgagate, gazetagate, Gwizdek Gate, Kasetagate, Kasyognagagate, klasztorgagate, Komisja-gate, Konkubina gagate, kosze-gate, Kuchcikgate, Meblegate, oscypekgagate, Pierścień-gate, Pikuśgate, promil gagate, przepustki-gate, pluskwagagate, ratuszgagate, Ropagate, rozporekg-gate, ruragagate, słupgagate, trabantgate, wódka-gate, Żarowa gate, żelatynagagate |
| -gate + foreign words to refer to Polish reality | Chinagagate, Cowgate, zippergagate, laptop-gate, Mobbinggate, moon-gate, Mozarella-gate, Oilgate, push-pull gate, schnapsgate-u, rubbergagate, rubel-gate, sex-gate, Waterclosetgagate, weaonsgate |

### APPENDIX 2: FORMATIONS WITH -(O)HOLIK

| -oholik + common nouns | biegholik, cięcioholik, cukrocholik / cukroholik, cychoholik, czatoholik, czekoladoholik, databoholik, fantasoholik, filatelistoholik, filmoholik, herbatoholik, internetoholik, jetochoholik, kinoholik, knajpoholik, komputeroholik, królikoholik, książkoholik, kupoholik / kupoholik, libroholik, maratonoholik, mlecznoryholik, mlekoholik, muzykoholik, naukoholik, netoholik, newsoholik, pizzoholik, pracoholik, randkoholik, rumoholik, sejmoholik, seksoholik, siecióholik, sklepoholik, słodyczoholik, słowoholik, spiskoholik, szopoholik, walkmanoholik, władzoholik, workaholik, wózkoholik, zadurzenioholik, zakupoholik, zwycięchoholik |
APPENDIX 2 (cont.)

<table>
<thead>
<tr>
<th>-holik + common nouns</th>
<th>belkotholik, internetholik</th>
</tr>
</thead>
<tbody>
<tr>
<td>-(o)holiczka + common and proper nouns</td>
<td>balsamoholiczka, błysczykoholiczka, czekoladoholiczka, cukroholiczka, fajkoholiczka, herbatoholiczka, gadżetoholiczka, kawoholiczka, komputeroholiczka, książkoholiczka, muzykoholiczka, pracoholiczka, prędkośćoholiczka, randkoholiczka, romansoholiczka, seksoholiczka, słodyczoholiczka, wikipedioholiczka, zakupoholiczka</td>
</tr>
<tr>
<td>-(o)holik + proper nouns</td>
<td>bisoholik (Radio Bis), islandoholik (Iceland), Wikipedioholik, Zuikoholik (Zuiko camera)</td>
</tr>
<tr>
<td>-(o)holik/eczka + acronyms, clippings</td>
<td>infoholik, kompoholik, mykoholik (mykoheterotrofy), socjoholik, specoholik, teleholik, TVholik, wikiholik, muzoholiczka, teleholiczka (1994)</td>
</tr>
</tbody>
</table>

APPENDIX 3: FORMATIONS WITH CYBER-

**APPENDIX 4: FORMATIONS WITH E-**

<table>
<thead>
<tr>
<th><strong>e-</strong></th>
<th><strong>common nouns</strong></th>
<th><strong>e-</strong></th>
<th><strong>proper nouns</strong></th>
<th><strong>e-</strong></th>
<th><strong>e-</strong></th>
<th><strong>e-</strong></th>
<th><strong>proper nouns</strong></th>
<th><strong>e-</strong></th>
<th><strong>adjectives</strong></th>
<th><strong>e-</strong></th>
<th><strong>acronyms</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>e-handlować, e-mailować</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e-mailowo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e-PEFRON, e-PKO, e-sklep AGD, e-sklep RTV, e-UPR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>