

**Resolution No. 3
of the Extraordinary General Meeting of
RAFAKO S.A.
of September 12th 2017**

to amend the Company's Articles of Association

Acting pursuant to Art. 430.1 of the Commercial Companies Code and Art. 30.1.5 of the Company's Articles of Association, the Extraordinary General Meeting resolves to amend the Company's Articles of Association as follows:

Section 1

The current wording of Art. 17 of the Articles of Association, reading:

"Art. 17

1. *The Supervisory Board shall be composed of five (5) to seven (7) members, appointed by the General Meeting for a joint term of office of two (2) years.*
2. *The number of the Supervisory Board members shall be each time defined by the General Meeting. Members of the Supervisory Board may be re-elected.*
3. *The Supervisory Board should also include independent members, with the number of such independent members and relevant independence criteria determined on the basis of applicable laws or corporate governance principles applicable to public companies."*

shall be amended to read as follows:

"Art. 17

1. *Subject to Art. 17.3 and Art. 17.4 below, the Supervisory Board shall consist of five (5) to seven (7) members elected by the General Meeting for a joint term of office of two (2) years, with the proviso that members of the Supervisory Board may be removed from office before the end of the term by the entity that appointed them.*
2. *The number of Supervisory Board members shall be each time defined by the General Meeting. Members of the Supervisory Board may be re-elected.*
3. *A shareholder who, directly or indirectly, together with its parent or subsidiary entities, holds more than 33% of the total voting rights in the Company is entitled to appoint three members of the Supervisory Board in the case of a five-member Supervisory Board and four members of the Supervisory Board in the case of a six- or seven-member Supervisory Board. The other Supervisory Board members shall be appointed by the General Meeting. This right shall not be vested in any shareholder who holds more than 33% of the total voting rights in the Company as a result of aggregation of the voting rights held directly or indirectly and the voting rights of other entities with whom it acts in concert as referred to in Art. 87.1.5 of the Act on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organised Trading, and Public Companies, dated July 29th 2005 (the "**Public Offering Act**"), and such entities are not its parent or subsidiary entities.*

4. *A shareholder holding more than 33% of the total voting rights in the Company, as specified in Art. 17.3 above, shall appoint and remove Supervisory Board members by submitting to the Company a written declaration of will containing the names of persons appointed to the Supervisory Board and specifying the functions entrusted to them.*
5. *Subject to Art. 17.6 below, the right mentioned in Art. 17.3 above shall expire if:*
 - a) *another shareholder, acting directly or indirectly, together with its parent or subsidiary entities, acquires and registers for the General Meeting shares conferring over 33% of the total voting rights in the Company, except for a shareholder who exceeds 33% of the total voting rights in the Company as a result of aggregation of voting rights conferred by shares held by it directly or indirectly with voting rights of other entities with whom it acts in concert as referred to in Art. 87.1.5 of the Public Offering Act, which are not its parent or subsidiary entities; or*
 - b) *any entity acquires (acting in its own name and for its own account) and registers for the General Meeting shares conferring over 50% of the total voting rights in the Company, all of which are acquired by such entity in a tender offer for all Company shares announced in accordance with the Public Offering Act.*
6. *If:*
 - a) *the number voting rights in the Company held by the shareholder referred to in Art. 17.5a above together with its parent and subsidiary entities falls to no more than 33% of the total voting rights in the Company ("**Reduction of the Number of Voting Rights**")*, the shareholder referred to in Art. 17.3 above, whose right expired pursuant to Art. 17.5a above shall again have the right referred to in Art. 17.3 above, provided that it holds, together with its parent and subsidiary entities, more than 33% of the total voting rights in the Company on the day when Reduction of the Number of Voting Rights takes place;
 - b) *the situation specified in Art. 17.5b above occurs, the right referred to in Art. 17.3 above shall ultimately expire and shall not be vested in any shareholder, regardless of the subsequent reduction in the number of voting rights in the Company of the entity that fulfilled the conditions specified in Art. 17.5b.*
7. *Subject to paragraphs 5 and 6 above, the right referred to in Art. 17.3 above shall expire three years after the registry court enters in the Register of Businesses of the National Court Register of the increase in the Company's share capital effected through the issue of no fewer than 1 (one) and no more than 42,500,000 (forty-two million, five hundred thousand) series K ordinary bearer shares with a par value of PLN 2 (two zloty) per share, in accordance with the resolution to increase the Company's share capital passed by the Extraordinary General Meeting of the Company on September 12th 2017.*
8. *If the right specified in Art. 17.3 above expires, all Supervisory Board members shall be appointed by the General Meeting.*

9. For the purposes of this Art. 17, parent and subsidiary entities shall mean, respectively, a person:
- a) meeting the criteria specified in Art. 4.1.4) of the Commercial Companies Code; or
 - b) having the status of a parent, a subsidiary, or both a parent and a subsidiary, within the meaning of the Act on Competition and Consumer Protection of February 16th 2007; or
 - c) having the status of a parent, subsidiary or jointly-controlled entity, or having the status of a parent and subsidiary or jointly-controlled entity within the meaning of the Accounting Act of September 29th 1994;
 - d) having (parent entity) or being under (subsidiary entity) decisive influence within the meaning of the provisions of the Act on Transparency of Financial Relations between State Authorities and State-Controlled Enterprises and on Financial Transparency of Certain Enterprises, dated September 22nd 2006; or
 - e) whose voting rights, conferred by shares held directly or indirectly in the Company, are aggregated with the voting rights of another person or persons in accordance with the Public Offering Act in connection with holding, selling or acquiring significant blocks of the Company's shares.
10. The Supervisory Board should also include independent members, with the number of such independent members and relevant independence criteria determined on the basis of applicable laws or corporate governance principles applicable to public companies.”

Section 2

This Resolution shall enter into force as of the date of its adoption, and the provisions amending the Articles of Association will take effect as of the date of registration of the amendments by the registry court.

The result of the vote:

1. Number of shares validly voted: 58,140,625
2. Percentage of shares voted: 68.46%
3. Total number of valid votes cast:
58,140,625 of which:
 - Votes in favour: 53,990,625,
 - Votes against: 4,150,000,
 - Abstentions: 0

**Resolution No. 4 of the Extraordinary
General Meeting of
RAFAKO S.A.
of September 12th 2017**

on: increasing the company's share capital through the issue of new shares, public offering of new shares, setting the record date for pre-emptive rights in respect of new shares, conversion into book-entry form and seeking admission of pre-emptive rights, allotment certificates and new shares to trading on a regulated market of the Warsaw Stock Exchange, amendment of the company's articles of association, and authorising the Supervisory Board to adopt the consolidated text of articles of association

Acting pursuant to Art. 430, 431, 432, 433 and 436 of the Commercial Companies Code of September 15th 2000 (the "**Commercial Companies Code**"), Art. 5 of the Act on Trading in Financial Instruments of July 29th 2005 (the "**Act on Trading in Financial Instruments**"), Art. 27 of the Act on Public Offering, Conditions Governing the Introduction of Financial Instruments to Organized Trading, and Public Companies of July 29th 2005 (the "**Public Offering Act**"), and Art. 30.1.6 of the Articles of Association of RAFAKO S.A. of Racibórz (the "**Company**"), the Extraordinary General Meeting of the Company (the "**General Meeting**") resolves as follows:

Section 1

1. The share capital of the Company shall be increased by no less than PLN 2 (two złoty) ("**PLN**") and no more than PLN 85,000,000 (eighty-five million złoty) through the issue of no fewer than 1 (one) and no more than 42,500,000 (forty-two million, five hundred thousand) series K ordinary bearer shares with a par value of PLN 2 (two złoty) per share ("**New Shares**").
2. New Shares will be issued through a rights offering (subskrypcja zamknięta) within the meaning of Art. 431.2.2 of the Commercial Companies Code, carried out as a public offering (oferta publiczna) within the meaning of Art. 3.1 of the Public Offering Act.
3. New Shares will carry the right to dividend as of January 1st 2017, on a par with the other Company shares, that is for the entire 2017.
4. New Shares may be paid for exclusively with cash contributions.

Section 2

1. The record date for the pre-emptive rights in respect of New Shares, within the meaning of Art. 432.2 of the Commercial Companies Code, is set for November 6th 2017 (the "**Record Date**").
2. The Company's shareholders holding Company shares as at the end of the Record Date will have pre-emptive rights to subscribe for New Shares, with 1

(one) pre-emptive right ("**Pre-Emptive Right**") for each Company share held as at the end of the Record Date.

3. The number of New Shares which may be subscribed for in the exercise of 1 (one) Pre-Emptive Right will be calculated by dividing the number of New Shares determined by the Company's Management Board in accordance with Section 3.1(b) hereof by the total number of Pre-Emptive Rights. The final number of New Shares allotted to a person who subscribed for New Shares in the exercise of their Pre-Emptive Rights will be calculated as the product of the number of Pre-Emptive Rights covered by all valid subscription orders placed by that person and the number of New Shares that may be subscribed for in the exercise of 1 (one) Pre-Emptive Right, rounded down to the nearest integer.
4. The shareholders holding Pre-Emptive Rights will be further entitled under Art. 436.2 of the Commercial Companies Code to place an additional subscription order for New Shares within the time limit set for the exercise of Pre-Emptive Rights if other shareholders fail to exercise their Pre-Emptive Rights. The New Shares covered by the additional subscription orders referred to in the preceding sentence will be allocated to shareholders proportionately to their additional orders.
5. The Pre-Emptive Rights exercise period will be specified in the prospectus for the New Shares prepared for the purposes of the public offering of New Shares as referred to in Section 1.2 hereof and seeking admission and listing of the Pre-Emptive Rights, allotment certificates in respect of the New Shares ("**Allotment Certificates**") and New Shares to trading on a regulated market of the Warsaw Stock Exchange (the "**WSE**") (the "**Prospectus**").
6. Any New Shares not subscribed for pursuant to Section 2.3 and Section 2.4 above will be allocated by the Company's Management Board at their own discretion, at a price which must not be lower than the issue price determined in accordance with Section 3.1(c) hereof.

Section 3

1. The General Meeting hereby authorises the Company's Management Board to:
 - (a) Determine the final amount by which the Company's share capital will be increased, with the proviso that such amount may not be lower than the minimum amount or higher than the maximum amount specified in Section 1.1 hereof;
 - (b) Determine the final number of offered New Shares pursuant to Art. 54 of the Public Offering Act; if the Management Board does not exercise this right, the number of New Shares offered in the public offering will be the maximum number of New Shares specified in Section 1.1 hereof.
 - (c) Determine the issue price for the New Shares;
 - (d) Determine the number of Pre-Emptive Rights entitling the holder to subscribe for one New Share.

2. The General Meeting hereby authorises the Company's Management Board to take any actions relating to the increase of the Company's share capital pursuant to this Resolution, the issue and offering of the New Shares, and seeking admission and listing of the Pre-Emptive Rights and New Shares to trading on a regulated market of the WSE, and particular to:
 - (a) Offer New Shares in a public offering;
 - (b) Determine detailed terms and conditions of subscription for and allocation of the New Shares, including to set the opening and closing dates of the subscription period for the New Shares, determine the rules governing subscription for and allocation of the New Shares (including rules for rounding the number of New Shares allocated to a person who placed a subscription order in the exercise of their Pre-Emptive Rights) and rules governing subscription for and allocation of the New Shares which are not subscribed for in the exercise of Pre-Emptive Rights nor under additional subscription orders referred to in Art. 436.2 of the Commercial Companies Code;
 - (c) Apply to the Polish Financial Supervision Authority for approval of the Prospectus;
 - (d) Enter into agreements required to secure successful issue and offering of the New Shares, for consideration or otherwise, including placement, firm commitment or standby underwriting agreements within the meaning of the Public Offering Act.

3. The General Meeting hereby authorises the Company's Management Board to:
 - (a) Make a decision not to perform or suspend the performance of this Resolution;
 - (b) Make a decision to abandon the public offering of the New Shares;
 - (c) Make a decision to suspend the public offering of New Shares, in which case the Company's Management Board will not be required to specify a new commencement date of the public offering, which may be determined and published by the Management Board at a later date.

Section 4

1. The General Meeting hereby resolves to convert the following securities into book-entry form within the meaning of the Act on Trading in Financial Instruments:
 - (a) 84,931,998 (eighty four million, nine hundred and thirty one thousand, nine hundred and ninety eight) Pre-Emptive Rights;
 - (b) No more than 42,500,000 (forty two million five hundred thousand) Allotment Certificates;

- (c) No more than 42,500,000 (forty two million, five hundred thousand) New Shares;
2. The General Meeting hereby authorises the Company's Management Board to execute with Krajowy Depozyt Papierów Wartościowych S.A. (the "CSDP") an agreement for registration of the Pre-Emptive Rights, Allotment Certificates and New Shares referred to in Section 4.1 above with the depository for securities maintained by the CSDP and to take any other action required in connection with their conversion into book-entry form.
 3. The General Meeting hereby resolves that the Company will seek admission and listing of the following securities to trading on a regulated market of the WSE:
 - (a) 84,931,998 (eighty four million, nine hundred and thirty one thousand, nine hundred and ninety eight) Pre-Emptive Rights;
 - (b) No more than 42,500,000 (forty two million five hundred thousand) Allotment Certificates;
 - (c) No more than 42,500,000 (forty two million, five hundred thousand) New Shares;
 4. The General Meeting hereby authorises the Company's Management Board to take any actions relating to seeking admission and listing of the Pre-Emptive Rights and New Shares specified in Section 1 above to trading on a regulated market of the WSE.

Section 5

1. The General Meeting hereby resolves to amend Art. 7 of the Company's Articles of Association, reading:

"The Company's share capital is PLN 169,863,996 (one hundred and sixty-nine million, eight hundred and sixty-three thousand, nine hundred and ninety-six zloty)."

to read as follows:

"The Company's share capital shall not be lower than PLN 169,863,998 (one hundred and sixty-nine million, eight hundred and sixty-three thousand, nine hundred and ninety-eight zloty) and higher than PLN 254,863,996 (two hundred and fifty-four million, eight hundred and sixty-three thousand, nine hundred and ninety-six zloty)."
2. The General Meeting hereby resolves to amend Art. 8 of the Company's Articles of Association, reading:

"The Company's share capital is divided into 84,931,998 (eighty-four million, nine hundred and thirty-one thousand, nine hundred and ninety-eight) shares with a par value of PLN 2.00 (two zloty) per share."

to read as follows:

“The Company's share capital shall be divided into no fewer than 84,931,999 (eighty-four million, nine hundred and thirty-one thousand, nine hundred and ninety-nine) shares and no more than 127,431,998 (one hundred and twenty-seven million, four hundred and thirty-one thousand, nine hundred and ninety-eight) shares with a par value of PLN 2 (two zloty) per share .”

3. The final amount by which the Company's share capital will be increased (which may not be lower than the minimum amount or higher than the maximum amount specified in Section 1.1 hereof), the amount of the share capital subscribed for, and the text of Art. 7 and Art. 8 of the Articles of Association will be determined by the Company's Management Board pursuant to Art. 432.4, and Art. 431.7 in conjunction with Art. 310 of the Commercial Companies Code, by making a representation in the form of a notarial deed specifying the amount of the share capital subscribed for after the allotment of the New Shares.
4. The General Meeting hereby authorises the Supervisory Board of the Company to prepare a consolidated text of the Company's Articles of Association, taking into account the amendments resulting from this Resolution.

Section 6

This Resolution shall enter into force as of the date of its adoption, and the provisions amending the Articles of Association will take effect as of the date of registration of the amendments by the registry court.

The result of the vote:

1. Number of shares validly voted: 58,140,625
2. Percentage of shares voted: 68.46%
3. Total number of valid votes cast:
58,140,625 of which:
 - Votes in favour: 58,140,625
 - Votes against: 0
 - Abstentions: 0

**Resolution No. 5 of the Extraordinary
General Meeting of
RAFAKO S.A.
of September 12th 2017**

to amend the Company's Articles of Association – addition of a new type of activity to the Company's principal business activities.

Acting pursuant to Art. 430.1 of the Commercial Companies Code and Art. 30.1.4, Art. 30.1.5, and Art. 31 of the Articles of Association of RAFAKO S.A., the Annual General Meeting resolves as follows:

The existing wording of Art. 6 of the Company's Articles of Association shall be amended to

read as follows: "The Company's principal business activities shall comprise:

- 1) Manufacture of steam generators, except central heating hot water boilers (PKD 25.30.Z);
- 2) Repair and maintenance of finished metal goods (PKD 33.11.Z);
- 3) Installation of industrial machinery, plant and equipment (PKD 33.20.Z);
- 4) Manufacture of metal structures and parts thereof (PKD 25.11.Z);
- 5) Other specialist construction activities n.e.c. (PKD 43.99.Z);
- 6) Manufacture of industrial cooling and ventilation equipment (PKD 28.25.Z);
- 7) Manufacture of other metal reservoirs, tanks and containers (PKD 25.29.Z);
- 8) Mechanical treatment of metal parts (PKD 25.62.Z);
- 9) Treatment and coating of metals (PKD 25.61.Z);
- 10) Manufacture of machinery for metalworking (PKD 28.41.Z);
- 11) Repair and maintenance of machinery (PKD 33.12.Z);
- 12) Activities in the field of architecture (PKD 71.11.Z);
- 13) Engineering activities and related technical consultancy (PKD 71.12.Z);
- 14) Manufacture of ovens, furnaces and furnace burners (PKD 28.21.Z);
- 15) Wholesale of other machinery and equipment (PKD 46.69.Z);
- 16) Wholesale of metals and metal ores (PKD 46.72.Z);
- 17) Manufacture of other general-purpose machinery n.e.c. (PKD 28.29.Z);
- 18) Manufacture of tools (PKD 25.73.Z);
- 19) Production of electricity (PKD 35.11.Z);
- 20) Transmission of electricity (PKD 35.12.Z);
- 21) Distribution of electricity (PKD 35.13.Z);
- 22) Trade in electricity (PKD 35.14.Z);
- 23) Production and supply of steam, hot water and air for air-conditioning systems (PKD 35.30.Z);
- 24) Wholesale of hardware, plumbing and heating equipment and supplies (PKD 46.74.Z);
- 25) Renting and operating of own or leased real estate (PKD 68.20.Z);

- 26) Other technical testing and analyses (PKD 71.20.B);
- 27) Other non-school forms of education n.e.c. (PKD 85.59.B);

- 28) Sewage disposal and treatment (PKD 37.00.Z);
- 29) Hotels and similar accommodation (PKD 55.10.Z);
- 30) Holiday and other short-stay accommodation (PKD 55.20.Z);

- 31) Restaurants and other permanent catering facilities (PKD 56.10.A);
- 32) Other catering services (PKD 56.29.Z);

- 33) Activities of cultural facilities (PKD 90.04.Z);
- 34) Other recreation and entertainment facilities (PKD 93.29.Z);
- 35) Activities related to organisation of fairs, exhibitions and conventions (PKD 82.30.Z);
- 36) Scientific research and development work in the field of other natural and technical sciences (PKD 72.19.Z);
- 37) Forging, pressing, stamping and roll-forming of metal; powder metallurgy (PKD 25.50.Z)
- 38) Manufacture of instruments and appliances for measuring, testing and navigation (PKD 26.51.Z);
- 39) Manufacture of electric motors, generators and transformers (PKD 27.11.Z);
- 40) Manufacture of electricity distribution and control apparatus (PKD 27.12.Z);
- 41) Manufacture of engines and turbines, except aircraft, vehicle and cycle engines (PKD 28.11.Z);
- 42) Manufacture of hydraulic and pneumatic drive equipment and accessories (PKD 28.12.Z);
- 43) Manufacture of other pumps and compressors (PKD 28.13.Z);
- 44) Manufacture of lifting and handling equipment (PKD 28.22.Z);
- 45) Repair and maintenance of electrical equipment (PKD 33.14.Z);
- 46) Treatment and disposal of non-hazardous waste (PKD 38.21.Z);
- 47) Dismantling of wrecks (PKD 38.31.Z);
- 48) Remediation activities and other waste management services (PKD 39.00.Z);
- 49) Construction of residential and non-residential buildings (PKD 41.20.Z);
- 50) Construction of roads and motorways (PKD 42.11.Z);
- 51) Construction of railways and underground railways (PKD 42.12.Z);
- 52) Construction of transmission pipelines and distribution systems (PKD 42.21.Z);
- 53) Construction of telecommunications lines and power lines (PKD 42.22.Z)
- 54) Construction of other civil engineering projects n.e.c. (PKD 42.99.Z);
- 55) Dismantling and demolition of buildings (PKD 43.11.Z);
- 56) Site preparation (PKD 43.12.Z);
- 57) Digging, drilling and boring for geological and engineering purposes (PKD 43.13.Z);
- 58) Installation of electrical wiring and fittings (PKD 43.21.Z);
- 59) Installation of plumbing, heat, gas and air-conditioning systems (PKD 43.22.Z);
- 60) Other building installations (PKD 43.29.Z);
- 61) Erection of roof covering and frames (PKD 43.91.Z);
- 62) Wholesale of waste and scrap (PKD 46.77.Z);
- 63) Warehousing and storage of other goods (PKD 52.10.B);
- 64) Software-related activities (PKD 62.01.Z);
- 65) Computer consultancy activities (PKD 62.02.Z);
- 66) IT equipment management activities (PKD 62.03.Z);
- 67) Other information technology and computer service activities (PKD 62.09.Z);
- 68) Data processing, hosting and related activities (PKD 63.11.Z);
- 69) Specialist design activities (PKD 74.10.Z);
- 70) Renting and leasing of cars and vans (PKD 77.11.Z);
- 71) Renting and leasing of other motor vehicles, except motorcycles (PKD 77.12.Z);
- 72) Renting and leasing of construction machinery and equipment (PKD 77.32.Z);
- 73) Renting and leasing of office machinery and equipment (including computers) (PKD 77.33.Z);
- 74) Renting and leasing of other machinery, equipment and tangible goods n.e.c. (PKD 77.39.Z);
- 75) Repair and maintenance of computers and peripheral equipment (PKD 95.11.Z);
- 76) Operation of sports facilities (PKD 93.13.Z);
- 77) Other sports activities (PKD 93.19.Z);
- 78) Other business and management consultancy activities (PKD 70.22.Z);
- 79) Construction of water projects (PKD 42.91.Z);

- 80) Manufacture of buses and coaches (PKD 29.10.C)
- 81) Manufacture of motor vehicles for the transport of cargo (PKD 29.10.D);
- 82) Manufacture of other motor vehicles, excluding motorcycles (PKD 29.10.E);
- 83) Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers (PKD 29.20.Z);
- 84) Production of cars (PKD 29.10.B);
- 85) Manufacture of electrical and electronic equipment for motor vehicles (PKD 29.31.Z);
- 86) Manufacture of other parts and accessories for motor vehicles, excluding motorcycles (PKD 29.32.Z)
- 87) Manufacture of batteries and accumulators (PKD 27.20.Z);
- 88) Manufacture of electric lighting equipment (PKD 27.40.Z);
- 89) Manufacture of other electronic and electric wires and cables (PKD 27.32.Z);
- 90) Manufacture of other electrical equipment (PKD 27.90.Z);
- 91) Manufacture of motorcycles (PKD 30.91.Z);
- 92) Manufacture of consumer electronics (PKD 26.40.Z);
- 93) Maintenance and repair of motor vehicles, excluding motorcycles (PKD 45.20.Z);
- 94) Repair and maintenance of electronic and optical equipment (PKD 33.13.Z);
- 95) Wholesale and retail trade of other motor vehicles, excluding motorcycles (PKD 45.19.Z);
- 96) Wholesale and retail trade of cars and vans (PKD 45.11.Z);
- 97) Wholesale of motor vehicle parts and accessories, except motorcycles (PKD 45.31.Z);
- 98) Retail trade of motor vehicle parts and accessories, except motorcycles (PKD 45.32.Z);
- 99) Wholesale and retail trade, repair and maintenance of motorcycles and wholesale and retail trade of related parts and accessories (PKD 45.40.Z);
- 100) Wholesale of electronic and telecommunications equipment and parts (PKD 46.52.Z);
- 101) Wholesale of other intermediate products (PKD 46.76.Z);
- 102) Non-specialized wholesale trade (PKD 46.90.Z);
- 103) Retail sale via mail order houses or via Internet (PKD 47.91.Z);
- 104) Other retail sale not in stores, stalls or markets (PKD 47.99.Z);
- 105) Combined office administrative service activities (PKD 82.11.Z)."

The result of the vote:

1. Number of shares validly voted: 58,140,625
 2. Percentage of shares voted: 68.46%
 3. Total number of valid votes cast: 58,140,625
- including:
- Votes in favour: 58,140,625
 - Votes against: 0
 - Abstentions: 0